DAILY METAL REPORTER

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In This Issue

SILVER — THE METAL WITH A FUTURE

By CLARK L. WILSON, Vice President
New Park Mining Company

COPPER — REVIEW AND OUTLOOK

By E. J. TALBERT, Copper Division
Business and Defense Services Administration

DOMESTIC METAL MARKET REVIEW

WASHINGTON REPORT

METAL STATISTICS

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TWO LINE *Editorials*

A cynical editorial writer says that "Nobody has really been benefited by the invention of television." What about all those who are making fortunes repairing television sets?

* * *

It seems safe to predict that lots of those who have been so shocked at the revelation of fixed TV quiz shows will continue to enjoy those terrific "grudge" wrestling matches on the TV programs.

* * *

The Taft-Hartley Act is supposed to bring about a cooling-off period, but its invoking in the steel strike seems to have made the union leaders hotter than ever.

* * *

Alaska's first year of statehood, it is announced, will be operated on a basis of a budget of $40,000,000 and an income of $35,000,000. It took some of the older states years to learn how to do that.

* * *

Mr. Herbert Hoover on his 85th birthday, asked the secret of his health and long life, replied: "Work." No wonder the moderns regard him as hopelessly outdated and old-fashioned in his ideas.

* * *

A British steeplechase rider says she gives her horse beer to drink before every race. No doubt the horse finds the hops helpful in getting over the jumps.

Washington Report

November 18, 1959

REPERCUSSIONS of the long copper industry strike were heard in the Capital during the month. Appeals were made to President Eisenhower to name a fact-finding board to help settle the dispute and to the Administration to release copper from Defense Production Act stockpiles to supply hard-pressed consumers. Both pleas proved fruitless, at least for the time being.

Replying to a request of Senator Frank E. Moss (Dem., Utah) for Presidential appointment of a fact-finding board to recommend a basis for settlement of the copper strike, George D. Morgan, deputy assistant to the President, said on behalf of Mr. Eisenhower:

"It has been this Administration's consistent position that any compulsory action on the party of the Government, either by way of compulsory arbitration or a mandated fact-finding board, constitutes an unwarranted interference with the process of free collective bargaining. When similar requests were made in the steel dispute, the President indicated that while he was opposed to the imposition of any board, he would seriously consider any joint requests received from the parties for the appointment of a non-government board with such power and authority as the parties might designate, since that would then be their voluntary act and an extension of their own collective bargaining. He has received no such requests."

Senator Moss had written the President proposing appointment of an impartial board "to ascertain the facts in this dispute, make public a full and complete report of the facts, and recommend a basis for settlement which will serve the interests of the West and be fair and equitable to the parties concerned."

Recent estimates indicate that the strike, which began August 10 has cost Utah more than $32,000,000, Nevada and Arizona some $2,500,000 each and New Mexico $1,300,000, Sen. Moss said.

Appeal to Washington

Some wire and cable makers have appealed to Washington for assistance in getting copper. The strike has cut off their sources of supply from primary producers and custom smelters. They told Washington officials that they are scraping the bottom of the barrel as far as their copper inventory is concerned, and that unless the strike ends or unless they get some relief they may have to suspend operations by December. The plants are already working on reduced schedules, which has entailed laying off quite a number of workers.

Referring to rumors that the Government may free some copper, a spokesman for Senator James E. Murray (Dem., Montana) who is chairman of the powerful Interior and Insular Affairs Committee, told *Metals* that: "Any report that copper from the DPA inventory (there are 136,000 tons in that inventory) is to be released is without foundation in fact. We have had repeated assertions from the Administration that there would be no release of this copper. We have further confirmation that this assurance still stands. The suggestion that there be an immediate release of copper is fantastic and absurd. This would be particularly true while the strike is still on."

Elsewhere on Capitol Hill it was stated that 25,000 or 35,000 tons of DPA inventory copper may be released, provided "an emergency situation" developed after the copper strike was completely settled and after all mines and refineries were back in operation. Whether the copper shortage constituted an "emergency" would be based on whether it threatened a shutdown of plants that would result in unemployment.

If such an emergency were to develop and if it were decided to liquidate some of the copper from the DPA inventory, the informant told *Metals*, the Government agency would sell the copper to producers and have them distribute it among the distressed fabricators. This procedure, it was said, would be in accordance with the unanimous resolution that was adopted at the last meeting of the American Mining Congress.

If and when DPA inventory copper is released, it probably will not give the wire mills any immediate relief because the copper consists of large cathodes and small lake ingots. The copper would have to be cast into wire bars and it would probably take some time before conversion facilities were available. The copper in its present form, however, could be used by brass mills.

Ask Zinc Sheet Tariff Curbs

Government assistance of another sort was urged by spokesmen for domestic zinc sheet manufacturing companies. They requested the Tariff Commission to grant increased protection against imports of foreign materials. Asking added curbs were Ball Brothers Co., of Muncie, Ind.; Illinois Zinc Co., Chicago, and Matthiessen & Hegeler Zinc Co., LaSalle, Ill. These three companies manufacture 100 per cent of the zinc sheet produced in the U. S. comparable to the imported sheets under question.

The Tarrif Commission conducted public hearings to determine whether zinc sheets, "as a result in whole or in part of the duty or other customs treatment reflecting concessions granted thereon under the General Agreement on Tariffs and Trade, are being imported into the U. S. in such increased quantities, either actual or relative, as to cause or threaten serious injury to the domestic industry producing like or directly competitive products."

Citing the growth in imports, the domestic producers reported that in 1952 only 42 tons of zinc sheets came into this country compared with 907 tons in 1958. U. S. sales in the same comparative periods fell from 6,371 tons to 3,987 tons, respectively.

Burnham B. Holmes, vice president of Ball Brothers, requested the Tariff Commission to recommend an increase in the duty from the 31.3 per cent prevailing in 1934 to 46.9 per cent ad valorem, the maximum 50 per cent boost which the commission can propose.

Also supporting the industry's petition for greater protection were spokesmen for the American Zinc, Lead and Smelting Company and the Emergency Lead-Zinc Committee. The

(Continued on Page 15)

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Silver — The Metal With a Future

By CLARK L. WILSON, Vice President, New Park Mining Company

A STUDENT of U. S. mining history will find repeated examples of the miner's basic philosophy "he is the perennial optimist." This was proven by the vision, hard work and luck that developed the silver mines of the Comstock lode—the gold camp of Cripple Creek — and dozens of others — with the most recent excitement, the now famous uranium boom. Together with being an optimist, the miner must of necessity be an opportunist. Timing can be the controlling factor of a successful venture.

In studying business cycles we note that the raw material producers, contrasted with the processors and consumers, take the greatest fluctuations of low prices with poor demand, to high prices when supplies are scarce. The miner has become very sensitive to these economics and is beginning to plan for the future, anticipating cycle changes caused by supply and demand as affected by expanding use, present and future sources, improved technology of extraction and, fortunately or unfortunately, depending on your personal views—the participation of Government in the economics of raw material markets. The Present silver market is, of course, subject to all these factors. I believe that with some logical and justified adjustment in Treasury policy, the other factors affecting the metal are such that silver will soon become of prime importance to the optimistic miner and investor. Before discussing this last statement, I would like to briefly review the background of silver mining.

History

Silver was probably discovered later than copper or gold, but was known and valued by men before the beginning of history. The most famous of the ancient silver districts was of Laurium, Greece, worked for several centuries, B. C. Recorded history indicates active silver miniung during the era of the famous Roman Empire. World production greatly increased following the discovery of America, as the Conquistadors developed the new world deposits of Mexico and Bolivia. U. S. silver production was insignificant until the discovery of the Comstock lode in Nevada in 1859. This discovery was followed by many others in the western states, placing the U. S. first in silver production from about 1871 to 1900. Since that time, Mexico has led the world in silver output, with the United States in second place.

Uses — Present and Future

Silver uses are fortunately becoming more diversified as time goes on. Consumption for jewelry, sterling and plate ware will certainly continue in proportion to the growth of the population.

Mr. Elgin Groseclose has recently pointed out before the House Subcommittee on Mines and Mining that monetary economists smile at the mention of silver as a monetary metal. At the same time, reports from the Director of the Mint disclose an interesting paradox. Year after year this country is demanding more and more silver for its coinage. In 1913 on organization of the Federal Reserve System, the annual requirement for silver coinage was 10 million ounces. Today, even with the vast substitution of paper money for metal, subsidiary coinage has been consuming 36 million ounces annually and in 1958 world consumption for coinage was 63 million ounces. There are several reasons offered for this demand—the expanding population—the general era of prosperity—and particularly the increase in vending machines requiring coins. Slugs of other metals would serve equally well to operate these machines, but the retailer requires a coin of intrinsic value and the desire for silver and gold persists.

Most people today still regard silver of value only for its use in silverware, jewelry and coinage. During 1958, the industrial uses of silver have accounted for over half of the estimated 250 million troy ounces of silver consumed in the free world. Industrial applications are expected to increase with silver in the arts becoming less important percentage-wise as a market for the product. Industry has finally recognized the unique chemical and physical properties of silver. Pure silver has the whitest color, the highest electrical and thermal conductivity and the highest optical reflectivity of all the metals. Silver forms salts and compounds with valuable photosensitive and bactericidal properties.

In a report to the National Western Mining Conference here last February, Mr. Ralph L. Wilcox of American Smelting and Refining Company, reported the most important industrial demand continues to be for photography. U. S. industry alone uses an estimated 30 million ounces annually or about half as much again as was consumed at the turn of the century for all domestic commercial use. Silver is now being used as a solder for bonding practically all non-ferrous metals and alloys, as well as iron and steel. These processes have become very important in aircraft, radar, radio and many military products. Since the end of World War II, silver brazing has become important in the manufacture of refrigerating, air conditioning, electric, automotive and household equipment. It is also being extensively used in brazing components of guided missiles and rocket aircraft where extremely high temperatures are met. This is the second most important industrial outlay for silver with annual consumption in the U. S. currently amounting to 20 to 24 million ounces. Silver is being used wherever strong ductile corrosion resistant joints are necessary and the higher temperature required for brass and nickel-silver alloy welding rods would cause damage to the metal to be joined.

A third rapidly growing industrial use for silver is in the electrical industry for all forms of electrical contacts where low contact resistance is important. This includes the expanding applications for domestic items such as electric blankets, fry pans, shavers, washers and dryers, etc. In addition, practically all contacts of high voltage switching equipment are silver-plated or otherwise employ silver on contact surfaces. The demand for silver for these purposes is estimated to be between 18 and 20 million ounces annually.

Lesser amounts of silver are used in the ceramic industry, not only as an element of pigment, but in the newer electronic ceramics used in complicated circuits for television, radio and other electronic devices. This field has barely been touched and with the present future possibilities, presents an unpredictable demand for silver.

A great deal of attention has been given recently to use of silver in batteries. Silver-zinc batteries weigh as little as 1/6th that of the conventional battery of similar capacity and require 1/5th the space. A discharge at constant voltage levels will offer great attraction for application in jet air-

* Presented at the 1959 Mining Convention, American Mining Congress, Denver, Colo., September 14-16, 1959.

craft, portable television, cameras, torpedoes, guided missiles and other uses. A possible adaptation for use in atomic submarines could create a substantial demand for silver.

Miscellaneous new uses for silver could include catalysts in the chemical industry, water sterilization, aircraft and diesel engine bearings and as control rod material in atomic energy power reactors.

U. S. monetary policy in regard to silver is governed by the silver purchase act of 1934, and declares the policy of government to be the acquisition of silver for the monetary stock until such stock represents ¼th the value of the total monetary stocks of gold and silver. At the present time there are in circulation, in excess of certificates against which a reserve 2 billion dollars in the form of silver certificates against which a reserve of 100% in silver is maintained, and it is worth noting that these certificates constitute the only paper money in use today that is fully backed by the metal it represents. In addition, the U. S. silver certificate is the only money anywhere that has survived two world cataclysms, is the only money that has never been in default, is the only money that has continued redeemable at its tenure at all times.

The subject of my remarks does not include a discussion of political aspects of silver usage, however, recent World War II experience indicates its importance as an anti-inflation measure throughout the many Asiatic countries and perhaps more importantly its use as payment to individuals who no longer trust paper money. The suggestion is made that a circulating silver money supply would add confidence to monetary policy in countries being assisted through our U. S. Foreign Aid Program.

Let's summarize silver usage with a few figures. Annual U. S. production for the past seven years has averaged 37 million ounces. The U. S. consumption has averaged 135 million ounces. Correspondingly, world figures are, production 220 million ounces, and consumption 250 million ounces. As I see it, this trend of imbalance can only increase in the future years. The long-range consumption statistics certainly indicate that the silver market will continue to have a very favorable growth.

Sources

The recent downward trend of silver mining activity in the U. S. is quite a contrast to the increased domestic demand for the metal. The economics are simple — a "pegged" market price with increasing mining and exploration costs reflecting the general inflation. Silver mines as such produce only 30% of our domestic metal. The other 70% is a by-product from copper-lead-zinc production, but in many cases is a very necessary component of the ore to keep that particular mine in production. This cost-price relationship has progressively decreased mine ore reserves with an accompanying loss of interest in the silver mining industry.

A domestic silver producer selling to the Treasury receives 70% of the metal value based on a price of $1.29 per ounce. This 70% backs the silver certificates. The remaining 30% is "free silver" and can be used for subsidiary coinage. It also represents profit to the Government at the expense of the producer. The producer is, in effect, paid with silver dollars coined from a portion of the silver delivered by him to the Treasury. At present, his payments consists of 70% of the silver delivered by him, and he can take it in silver dollars or in silver certificates which are exchangeable on demand for silver dollars. Over the years the seigniorage retained by the Treasury has been progressively reduced until it now stands at 30%. Silver producers agree that this policy of progressive reduction should have been continued until seigniorage was completely eliminated. This fund of "free silver" in the U. S. Treasury now overhangs the world market and has very effectively placed a ceiling on the world silver price by artificially affecting the laws of supply and demand. By the Act of July 31, 1946, the Secretary of the Treasury is authorized to sell silver held in the Treasury's general fund at such prices as in his discretion he may determine, but not less than 90½c per ounce. Under this authority the Treasury has been selling silver to users in the arts and industry or professions at 91c per ounce f.o.b. San Francisco or 91⅜c per ounce f.o.b. New York. This holds the world market price to within fractions of a cent of the Treasury price. Even at that small differential, our domestic production is now selling on the world market, further reducing the Treasury "free silver" stock.

A summary of the facts indicates that silver is in an interesting situation:

1. World production has leveled off for the past decade.
2. World consumption is exceeding production, particularly through development of new uses.
3. The miner receives from the Treasury only 70% of the value of his product.
4. The Treasury is setting an artificial price through sale of free silver.

Normal coinage demands alone will deplete this stock in six years. With rising industrial demand and with continued Treasury sales to industry, the time approaches when the supply will be exhausted. The Treasury will then be forced into the market for the added silver needed with the probable consequence of higher costs to the Treasury. Prudent fiscal management of the public funds therefore indicates that Treasury sales of silver be discontinued in order to conserve silver for the Treasury's own needs.

Conclusions

1. The Government should eliminate seigniorage to provide a price that will encourage production of the additional needed silver and at the same time eliminate a special sales price to selected buyers.

2. The present sales of "free silver" artificially affect the world market price, penalizing the miner and jeopardizing a much needed silver supply. This practice should stop now, and must stop in the near future as the present supply disappears.

I believe the miner is justified in being optimistic regarding the future of silver as the metal needs increase and the market price must increase as Treasury supplies are reduced.

Mine Production of Silver Dropped 25% in September

Washington—Domestic mine output of 1,673,326 fine ounces recoverable silver dropped 25 per cent in September 1959 compared with August and was 37 per cent below that in the corresponding period of last year, according to the Bureau of Mines, United States Department of the Interior. The sharp drop during the month was due principally to the continuation of the labor strikes begun last month at copper mines and smelters recovering byproduct silver.

All of the principal silver-production States shared in the declines with percentage decreases as follows: Arizona, 49; Colorado, 23; Idaho, 3; Missouri, 2; Montana, 99; Nevada, 26; New Mexico, 77; Utah, 41; and Undistributed States (principally Washington), 42.

NICKEL USED IN 4000 B.C.

Meteoric iron containing from 5 to 26 per cent nickel was used for knives, axes and other implements as early as 4000 B.C.

Copper Industry — Review and Outlook

By E. J. TALBERT, Chief, Program and Requirements Branch, Copper Division, Business and Defense Services Administration, Commerce Department

THE COPPER industry continued at a high level of operations through the second quarter of 1959. Increased deliveries to meet consumers' needs, plus stepped-up demand in anticipation of a strike, were major factors.

Shipments of copper-base mill and foundry products were above those of the preceding quarter for the third consecutive quarter. New supply of refined copper and copper-base scrap was at the highest level in 3 years. Refinery production of primary and secondary copper was up slightly from the high level of the first quarter and was supplemented by an increase of 6,000 tons over the first quarter in imports of refined metal. Brass mills, ingot makers, and other processors showed an 11 per cent increase in receipts of scrap. Fabricators' inventories of refined copper at the end of June were higher, offsetting a substantial drop in stocks held by refiners. Total stocks of scrap were boosted slightly by brass mill inventories, despite a minor decline in holdings of ingot makers and foundries. Unfilled orders at brass and wire mills on June 30 were down from the end of March.

The slight second-quarter gain in shipments of brass mill products was not shared by all of the products in this group. Alloyed sheet and unalloyed rod experienced good increases, and alloyed tube was up 2½ million pounds (8 per cent). The other products lost ground, chiefly alloyed rod, with a decline of about 10 million pounds.

Shipments of 412 million pounds of copper wire mill products, up 7 million pounds from those of the January-March period, were the highest since the second quarter of 1956. Brass and bronze foundries shipped 262 million pounds of castings, an increase of about 9 per cent above the preceding quarter. This was about 75 million pounds greater than the same quarter a year ago and was the highest volume since the second quarter of 1956.

Brass mills consumed refined copper and scrap at only a slightly higher rate over the first quarter than was indicated by the increase in shipments of finished products. In contrast, wire mills consumed 510 million pounds of refined copper in the second quarter and shipped only 412 million pounds of products. Consumption was 70 million pounds higher while shipments were but 7 million pounds above the previous quarter. This 24 per cent excess of raw material consumption over shipments of finished products is exceptionally high and indicates a probable accumulation of shelf goods items in anticipation of a short supply of refined copper. Wire mills increased their holdings of refined copper by 30 million pounds from the end of the first quarter, bringing them to the inventory level of June 30 a year ago.

Imports of brass mill items as a group reached a new record high of 50 million pounds in the second quarter of 1959. This represented 8 per cent of total demand (domestic shipments plus imports). For some products, the import impact was much greater.

Seamless brass tubing imports were at a near-record high, 10½ million pounds, exceeded only by the 11 million pounds brought in during the second quarter of 1958, and up a million pounds from a quarter earlier. They constituted 24 per cent of total U. S. demand during the quarter, a proportion exceeded only during the second quarter a year ago.

Seamless copper tubing imports also showed an increased rate during the second quarter, reaching 9 per cent of demand. More than 10 million pounds of copper tube has been imported in each quarter since the fourth quarter of 1957.

West Germany and the United Kingdom, in that order, continued as the principal foreign suppliers of copper and brass tube.

Copper sheet imports also continued at their high levels of the past year and a half, totaling 11 million pounds and amounting to 18 per cent of demand.

Brass rod imports from West Germany reached 832,000 pounds in June, more than twice those of May and almost double the 1958 monthly average of 436,000 pounds. Switzerland,

TABLE I—Demand for Copper-Base Mill and Foundry Products, 1959**

(Millions of pounds — metal weight)

	1st quarter		2nd quarter		3rd quarter		4th quarter		
	Stated requirements	Actual deliveries	Stated requirements	Actual deliveries§	Stated requirements	Est. deliveries	Stated requirements	Est. deliveries	Year Est. deliveries
Brass mill products	31	618	29	628	29	500	29	580	2,326
Unalloyed*	6	236	4	234	4	175	4	210	855
Rod, bar, and wire	..	28	..	33	..	..	..	..	..
Sheet and strip	..	52	..	49	..	..	..	..	..
Tube and pipe	..	133	..	129	..	..	..	..	..
Alloyed*	25	382	25	394	25	325	25	370	1,471
Rod, bar, and wire	..	177	..	168	..	..	..	..	..
Sheet and strip†	..	153	..	164	..	..	..	..	..
Tube and pipe	..	32	..	35	..	..	..	..	..
Wire mill products* (copper content)	19	406	19	413	19	390	19	410	1,619
Foundry and powder mill products	7	252	7	257	7	247	7	253	1,027
Foundry products	..	240	..	262	..	235	..	240	977
Powder mill products	..	12	..	13	..	12	..	13	50

** Stated requirements represent military demand under the Defense Materials System (DMS); deliveries represent effective total demand, both military and nonmilitary, as indicated by current information. § Preliminary. * Actual deliveries include imports of mill products (not available in detailed brass mill product breakdown); estimated quarterly deliveries exclude imports. † Includes military ammunition (from strip) on a cup-and-disc weight basis.

Source: U. S. Department of Commerce Reporting Forms BDSAF-83 and BDSAF-84, Bureau of the Census, and Office of Civil and Defense Mobilization.

Reprinted from quarterly Copper Industry Report of BDSA.

however, continues to be the principal foreign source of brass rod, supplying more than 3 million pounds during the second quarter.

Exports of communication and signal wire and cable were at the unusually high level of more than 10 million pounds during the second quarter. Virtually all of this quantity, about 9½ million pounds, valued at almost $3 million, went to the United Kingdom during May. Except for exports of bare copper wire and cable of 858,000 and 985,000 pounds, respectively, during May and June, exports of other mill products continued at about normal levels.

The estimated level of operations for the copper industry for the rest of 1959, as shown in table 1 and 2, is based on expected demand and normal supply. However, actual supply conditions cannot now be foreseen in view of the indefinite strike situation. A prolonging of the work stoppages into the fourth quarter will place an increasingly tighter squeeze on the supply of copper to consumers. All signs indicate that once operations are resumed, there will be a favorable demand for copper and copper-base alloy mill and foundry products in all consuming industries.

TABLE 2.—Supply and Distribution of Copper-Base Raw Materials, 1959
(Thousands of short tons — copper content)

Type of material and operation	First quarter (A)	Second quarter (A)p	Third quarter (E)	Fourth quarter (E)	Year (E)
Supply:					
Refined — total	455	490	311	460	1,716
Production:					
Primary:					
Domestic ores	299	303	165	300	1,067
Foreign ores	81	80	70	75	306
Secondary*	65	71	36	70	242
Imports of refined	10	36	40	15	101
Scrap receipts — total	217	240	215	230	902
Brass mills†	89	102	90	100	381
Ingot makers*	70	73	70	70	283
Other processors‡	58	65	55	60	238
Total available new supply	672	730	526	690	2,618
Distribution:					
Consumption — total	603	665	577	618	2,463
Refined copper	392	434	367	393	1,586
Brass mills	160	166	145	160	631
Wire mills	220	255	210	220	905
Ingot makers	1	1	1	1	4
Foundries and other**	11	12	11	12	46
Scrap	211	231	210	225	877
Brass mills	93	98	90	100	381
Ingot makers*	68	76	70	70	284
Foundries and other**	50	57	50	65	212
Exports — total	73	57	30	40	200
Refined copper	62	48	25	35	170
Scrap and alloy ingots	11	9	5	5	30
Other distribution§	(4)	8	(81)	32	(45)
Refined copper	1	8	(81)	32	(40)
Scrap	(5)	0	0	0	(5)

(A) Actual; (E) Estimated, p Preliminary. *Refined copper produced by secondary smelters included in secondary production, and excluded from ingot makers' scrap receipts and scrap consumption. † Excludes webbing scrap, classified as "run-around," generated in the production of military ammunition cups and discs; includes own-generated scrap. ‡ Includes exporters. ** Includes powder mills and miscellaneous users. § Net additions to producers' and fabricators' stocks and government stockpiles; parentheses denote net deficits or net withdrawals from inventories

Source: U. S. Department of Commerce Reporting Form BDSAF-83, Bureau of the Census and Bureau of Mines.

Copper Consumption by Important Countries

(A. B. M. S.)
(In tons of 2,000 lbs.)

This is a reporting of copper consumption during the year 1958 and the first half of 1959 in some of the copper using countries.

For U. S. A., copper deliveries are shown, and for Canada and United Kingdom, the figures are based on consumption in mill products. For other countries, the accounting is by the conventional formula of production (if any) or deliveries plus imports, minus exports, with no account of plus or minus in stocks, unless noted otherwise.

	1958	1959 Jan.-Mar.	1959 Apr.-June	1959 Jan.-June
U. S. A.*†:				
From primary	1,048,100	320,000	384,900	704,900
From secondary	131,300	38,800	35,600	74,400
Total U. S. A.	1,179,400	358,800	420,500	779,300
Canada*‡	122,900	30,200	34,600	64,800
Belgium	80,000††	*	*	*
Denmark	4,200	1,500	1,000	2,500
France	239,500	51,000	48,900	99,900
Fed. Republic of Germany	479,700	115,900	129,400	245,300
Italy	114,200	25,400	35,900	61,300
Netherlands	56,300††	6,500	7,200	13,700
Sweden	67,200	21,100‡‡	15,900	37,000
Switzerland	37,300	7,900	8,600	16,500
United Kingdom (†) (‡)	598,800	125,100	133,700	258,800
India†	63,500	13,400	13,400	26,800
Total as reported	3,043,000	756,800‡‡	849,100	1,605,900

*† Copper Institute.
*‡ Dominion Bureau of Statistics.
† British Bureau of Non-Ferrous Metal Statistics.
* Not available.
†† Shipments of Copper Institute Members.
‡ Includes Secondary Refined Copper.
‡‡ Revised.

OME Sets Federal Aid for Idaho Copper Exploration

Washington — The Department of the Interior announced that in October the Office of Minerals Exploration executed a contract with the Golden Copper Queen Mining Corporation of Pocatello, Idaho, for financial assistance to explore for copper in Lemhi County, Idaho. Estimated cost of the work is $40,270 and maximum Government participation is 50 per cent, or $20,135.

Under the OME program, Federal financial assistance is available to qualified applicants who wish to explore for any of 32 different mineral commodities. Application forms and additional information about the program may be obtained from the Office of the Interior, Washington 25, D.C.

LARGEST NICKEL REFINEERY

The world's largest nickel refinery is that of International Nickel located at Port Colborne, Ontario.

LONDON COPPER PRICES VERY VOLATILE AS MARKET RESPONDS TO U. S., CHILEAN STRIKE DEVELOPMENTS

Tin Shows Good Tone, With Buffer Stocks Holdings Reported Below 10,000 Tons; Prompt Lead Supply Situation Tightens; Note Further Strength in Zinc Status

November 6, 1959

By L. H. TARRING
London, England

DOMINATED by the strike situation in the United States and Chile, the copper market here proved very volatile during October. Prices rose very sharply on balance (cash at one time was £37 higher than the figure prevailing on October 1st) whilst from a small contango at the beginning of October a premium on spot metal of as much as £19 a ton had developed by October 27th although subsequently this shrunk to around £10-£12 a ton.

It has been interesting to see how long it took for the very serious loss of production in the United States and Chile to make any serious impact on the market here. This was presumably due to the fact that it was generally believed that stocks at the beginning of the strike were high and also that the stoppage would not be so prolonged as it has proved to be.

Gradually, however, as the pressure of American demand for prompt shipment metal from the U. K. and Europe began to swell and stocks in Metal Exchange official warehouses started shrinking rapidly, the market suddenly seemed to take fright at the situation. The attitude of consumers on this side was affected to some extent by the fact that in addition to buying raw copper the United States appeared as a big buyer of semi-finished products, with the result that U. K. and continental fabricators' order books quickly moved from a position of being moderately good to one of congestion in most products. Then in the last week or two China has appeared in the European market as a buyer of wire and wire rods having taken fair quantities of the former from France and the latter from the U. K. Russia, on the other hand, has been showing little interest for some time.

No Stockpile Disposals

The announcement that there is no likelihood of the release of any copper from the U. S. stockpile to meet the immediate situation occasioned no surprise here and had little or no effect on market sentiment. It is now realized that there is no source from which any substantial quantities of early copper can be got to alleviate the situation and, after a temporary setback when the Braden strike was settled, the market is again displaying quite a firm tone and could conceivably move to appreciably higher prices unless there is an early end to the U. S. strikes.

The impact of the Braden strike on the European supply position now looks as if it might be rather less severe than the theoretical loss of some 15,000 tons of production would have indicated. This is due to the fact that the October shipments were got away in good time owing to forward planning on the part of the company and any deficiency in November is expected to be made up pretty quickly.

The most serious shortage at the moment, as usually seems to be the case in a tight market, is in electrolytic wirebars high premiums for which have been, and are being, paid as and when any prompt or early material has been offered. In the U. K. premiums of the order of £10-£15 have been reported but on the Continent over £20 is reported to have been paid on occasion. The renewed racial troubles in the Belgian Congo have not disturbed the copper area there and as far as is known the transport strike in the Congo a few weeks ago had no serious effect on the movement of copper. Meanwhile, both the big Rhodesian producing groups have announced that they do not intend to increase production as a short term measure to meet the present situation.

In the meantime, period contracts for 1960 have now been negotiated by a number of European consumers and, in view of the tonnages involved, it is already being suggested that the stringency in supplies (bearing in mind the inevitable re-building of inventories when the U. S. strike is over) may well stretch over the opening months of 1960.

Tin Tone Good

Despite the fact that the U. S. steel strike has lasted much longer than

U. K. COPPER STATISTICS

According to the British Bureau of Non-Ferrous Metal Statistics, U. K. production of refined copper in August showed a decline to 5,902 tons of primary and 5,651 tons of secondary compared with the July totals of 6,230 tons and 6,011 tons respectively. Stocks of refined copper rose to 74,347 tons (69,049 tons) and blister was also up at 15,136 tons (12,937 tons). Of the refined stocks consumers held 37,402 tons compared with 35,650 tons in July. Consumption showed a decline to 40,531 tons (44,572 tons). Details are given below:

	—8 months ending—		
Unalloyed Copper Products:	**Aug. 1959**	**Aug. 31, 1958**	**Aug. 31, 1959**
Wire*	14,974	182,681	139,664
Rods, bars & sections	1,272	13,858	12,409
Sheets, Strip & Plate	3,464	36,614	36,926
Tubes	4,164	39,842	41,921
Castings & Misc.	650	5,200	5,200
Alloyed Copper Products:			
Wire	1,142	9,952	11,191
Rods, bars & sections	9,967	77,167	87,068
Sheet, Strip & plate	6,246	58,245	64,629
Tubes	1,340	15,424	13,969
Castings & misc.	5,113	47,818	47,478
Copper sulphate	214	15,437	24,646
Total all products	48,546	502,238	485,101
Copper content of output	40,621	424,194	394,297
Consumption of refined copper†	30,886	334,764	294,412
Consumption of copper & alloy scrap‡ (copper content)	9,735	89,430	99,885

* Consumption of H.C. Copper and Cadmium Copper Wire Rods for Wire and Production of Wire Rods for Export.

† Virgin and Secondary Refined Copper.

‡ Consumption of copper in scrap is obtained by the difference between copper content of output and consumption of refined copper, and should be considered over a period since monthly figures of scrap consumption are affected by variations in the amount of work in progress.

U. K. TIN STATISTICS

Tin consumption during August showed a further decline to 1,224 tons compared with 1,682 tons the previous month, according to the British Bureau of Non-Ferrous Metal Statistics, Production was down to 1,908 tons (plus 14 tons secondary) from the July figures of 2,735 tons (30 tons) and stocks in the U. K. at the end of August were also lower at 10,752 tons against 11,255 tons the previous month. Details of consumption of primary tin are given below:

	—8 months ending—		
	Aug. 1959	**Aug. 31, 1958**	**Aug. 31, 1959**
Tinplate	415	6,154	6,289
Tinning:			
Copper wire	36	337	356
Steel wire	8	61	68
Other	57	480	513
Total	101	878	937
Solder	158	1,181	1,437
Alloys:			
Whitemetal	227	1,856	1,949
Bronze & Gunmetal	132	1,521	1,271
Other	33	262	280
Total	392	3,639	3,500
Wrought Tin*			
Foil & sheets	20	174	210
Collapsible Tubes	16	178	148
Pipes, wire & capsules	2	26	25
Total	38	378	383
Chemicals†	120)	659	934)
Other uses‡	)	72	)
Total all trades	1,224	12,961	13,480

* Includes Compo and 'B' Metal.

† Mainly Tin Oxide.

‡ Mainly powder.

AVERAGE BRITISH PRICES FOR COPPER, TIN, LEAD, ZINC

(Per Long Ton)

Mean of Bid and Asked Cash Quotation at Close of Morning Session on London Metal Exchange

	COPPER			TIN			LEAD		ZINC	
	Cash	3 Months	Settlement	Cash	3 Months	Settlement	Current Month	3rd Following	Current Month	3rd Following
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1954 Averages	248 17 11	239 17 7	249 0 11	719 8 11	709 17 7	720 6 7	98 8 12	94 7 4	78 5 4	77 16 11
1955 Averages	351 14 11	341 0 3	352 5 6	740 2 12	736 12 11	740 12 8	105 17 3	105 9 6	90 13 4	89 12 3
1956 Averages	328 14 5	324 13 1	329 1 8	787 14 9	774 7 7	788 13 3	116 6 5	114 8 9	97 14 3	95 3 7
1957 Averages	219 8 10	221 0 3	219 12 10	754 15 4	747 10 10	755 3 11	96 12 9	96 13 2	81 11 7	80 1 1
1958 Averages	**197 13 3**	**197 9 3**	**197 16 11**	**734 18 6**	**734 17 11**	**735 6 1**	**72 15 8**	**73 6 10**	**65 17 12**	**65 10 12**
1959										
January	230 2 0	227 5 10	230 5 0	758 15 6	759 4 9	759 2 10	71 17 0	72 3 3	74 17 8	72 18 8
February	236 4 2	235 10 8	236 7 6	772 9 9	773 9 0	772 15 0	69 19 4	70 16 6	73 13 8	71 19 8
March	248 10 3	247 12 2	248 13 6	779 14 9	783 5 9	780 1 6	69 10 3	71 4 2	75 2 5	73 18 8
April	240 0 5	240 6 6	240 3 5	782 5 3	783 15 5	782 11 4	69 1 0	70 8 4	72 13 9	72 9 2
May	236 4 2	236 11 6	236 6 9	784 4 3	784 10 9	784 10 0	70 16 0	71 13 10	77 7 1	75 17 6
June	230 0 11	230 0 4	230 3 8	788 7 9	789 8 10	788 14 1	69 13 4	71 5 8	78 8 2	77 6 11
July	220 17 6	221 14 9	221 0 3	792 6 6	790 16 4	792 13 6	70 5 0	71 1 2	80 10 7	79 13 4
August	232 16 9	231 9 3	233 0 0	792 18 6	791 18 3	793 4 6	72 3 3	73 3 1	85 5 11	83 19 5
September	230 7 6	230 8 8	230 10 3	792 15 0	792 6 4	793 0 5	70 14 5	72 1 10	86 1 5	84 19 10
October	241 18 5	236 17 5	242 2 11	794 2 9	794 8 2	794 8 2	70 12 5	71 12 2	91 7 4	89 9 2

anyone here had anticipated and that it is still uncertain how soon a return to work under the Taft-Hartley Act will occur, the London tin market has continued to have quite a good tone. Indeed, consumer demand generally—including, it is believed, a certain amount of forward interest from America — has been on a sufficient scale for further sales by the Buffer Stock Manager to be required to hold the cash price steady. Forward metal has begun to creep up and a moderate contango is now ruling.

There is naturally considerable interest as to the level of Buffer Stock holdings and some market estimates suggest that they are now well below 10,000 tons. However, as under present arrangements, the Buffer Stock Manager is free to either buy or sell, there is some uncertainty as to whether any Buffer Stock purchases have been made in the Eastern market which would, partially at any rate, offset sales in London.

Meanwhile, it has been reported from Kuala Lumpur that Malaya will ask for the present Buffer Stock to be liquidated when the International agreement expires in the middle of 1961. Malaya would then press for a new Buffer Stock to be set up under the new Agreement which is now being drafted. It remains to be seen, of course, whether the Agreement will be renewed, but the Malayan attitude is apparently inspired by a desire on the part of the mines there to get back their money contributions to the Buffer Stock to enable them to pay off loans from their Government to meet their contributions to the present stock. The draft of the new Agreement will be considered by the International Tin Council in December, prior to submission to a United Nations conference in New York in May when a final decision is expected to be made.

Lead Attracting Interest

After presenting a lacklustre appearance for a long time, the lead market in the last week or two has been attracting interest owing to a fair rise in prices and the emergence of a backwardation as the prompt supply position on the open market tightened. So far, there is little evidence that consumers have had any serious difficulty in covering their requirements of physical metal but the situation has certainly become different from what it was.

As far as the London Metal Exchange is concerned one of the more important factors has been the absence of any arrival of Spanish lead in this country recently, whilst on a broader front it appears that with overall consumption beginning to reflect the rising level of industrial production in the U. K. and on the Continent the supply restrictions initiated earlier in the year are now beginning to be really felt for the first time.

Obviously producers will welcome the improvement in prices, as for a long time now the metal has stood at an unattractive level. It may also make it easier for them to take a decision to relax the curtailment of exports of zinc and its concentrates which has appeared to be increasingly necessary. Naturally, consumer buying has tended to broaden as the market position has hardened and it is as yet rather too soon to determine how far actual consumption has increased although there has, without doubt, been some improvement.

Further Zinc Strength

Although at the present moment zinc prices on the London market are £4 or £5 a ton below their recent peak, the basic position of the metal has shown further strength during the past month. At one time prices touched £98 a ton and there was even talk that they might cross the £100 mark. However, with the backwardation at the end-monthly settlement widening to as much as £5.10.0d a ton, some metal seems to have been attracted to the London market from the Continent and the initial rush of consumer buying has subsided.

Nevertheless, there has been sufficient anxiety over the situation for some people to urge that the British Government should resume the release

(Continued on Page 15)

U. K. LEAD STATISTICS

According to the British Bureau of Non-Ferrous Metal Statistics, lead stocks in the U. K. at the end of August were 66,048 tons (56,138 tons imported and 9,910 tons of English refined) against the July figures of 67,586 tons (58,661 tons and 8,925 tons). Production during August fell slightly to 6,624 tons compared with 6,667 tons a month earlier. Full consumption details are given below:

	—8 months ending—		
	Aug. 1959	Aug. 31, 1958	Aug. 31, 1959
Cables	6,573	65,865	61,135
Batteries—as metal	2,166	19,407	18,977
Battery Oxides	1,978	17,936	17,438
Tetraethyl lead	1,966	12,800	15,508
Other oxides & compounds	1,285	16,210	16,782
White lead	558	5,863	5,166
Shot	224	3,030	2,510
Sheet & pipe	4,540	42,963	44,127
Foil & collapsible tubes	232	2,718	2,273
Other rolled & extruded	551	3,748	4,346
Solder	1,004	8,752	9,478
Alloys	1,092	12,266	11,596
Miscellaneous uses	1,189	8,237	9,035
Total consumption	23,358	219,795	218,371
of which:			
Imported virgin lead	11,844	109,201	112,828
English refined	4,912	49,609	46,808
Scrap including remelted	6,602	60,985	58,735

U. K. ZINC STATISTICS

Zinc stocks during August rose to 40,358 tons against 37,427 tons a month previously, according to the British Bureau of Non-Ferrous Metal Statistics. Of this total consumers held 18,084 tons. Production also showed a gain at 5,860 tons compared with the July figure of 5,507 tons. Consumption details are given below:

	—8 months ending—		
	Aug. 1959	Aug. 31, 1958	Aug. 31, 1959
Brass	7,248	61,633	68,450
Galvanizing:			
of which:	6,385	56,891	61,826
General	2,492	21,825	21,738
Sheet	1,394	12,763	15,659
Wire	1,429	13,581	12,932
Tube	1,070	8,722	11,497
Rolled zinc	1,442	16,323	15,485
Zinc Oxide	1,850	17,317	18,450
Zinc diecasting & forming alloy	3,069	31,444	34,133
Zinc Dust	725	6,700	7,352
Miscellaneous uses	847	7,321	7,180
Total all trades	21,566	197,629	212,876
of which:			
Slab zinc			
High purity (99.99%)	3,320	34,455	37,062
Electrolytic & high grade (99.95%)	3,994	37,979	39,991
G.O.B. Prime Western & debased	8,195	71,644	78,275
Other virgin material	195	1,986	1,609
Remelted zinc	408	3,452	3,725
Scrap—(zinc content) zinc metal, alloys & residues	2,069	20,426	21,139
Brass & other copper alloys	3,385	27,687	31,075

COPPER STRIKE LOG JAM BROKEN AS KENNECOTT AND STEEL UNION AGREE ON 22.3c TWO-YEAR PACKAGE

Pact Weakens Outside Market and LME; Lead Business Moderate; Zinc Steady at 12.50c for Prime Western; Little Interest in Tin ; Aluminum Easier; Palladium Up

November 20, 1959

THE copper strike log jam has been broken up as a result of an agreement between the Kennecott Copper Corporation and the United Steelworkers of America (AFL-CIO). Settlement of the Kennecott dispute on the basis of a 22.3 cents hourly two-year package proposal, however, will not necessarily set a pattern for other strikebound properties. Many copper properties are said to fall into the class of high-cost producers which could not afford a settlement on these terms.

Prospects of an early settlement in the copper strike caused premiums to weaken in the outside market. In one week, prices for December delivery of copper wire bars dropped to 37.50c from 40.00c. Those copper producers whose plants are operating price their shipments at 33.00c a pound, delivered. There were no official custom smelter quotations, with these sales being made on a negotiated basis.

Among the other metals, the zinc price became finally stabilized at 12.50c for the Prime Western grade at 12.50c East St. Louis after an attempt to push the price up from 12.00c to 13.00c had fizzled. Lead remained steady at 13.00c New York although demand was light. The end of the steel strike did not bring with it any demand for tin.

Labor Developments

Meetings between the copper producers and the various unions have been stepped up recently. At one point it appeared that the Phelps Dodge agreement with the AFL-CIO Metal Trades Councils (the craft unions) at its Arizona properties would be reached, on a basis of a two-year package valued at 15.7 cents an hour. But Kennecott's offer to the USW apparently torpedoed the tentative pact between Phelps Dodge and the Council. The Council locals, which had to ratify the agreement, rejected it on the news of the Kennecott offer. It was expected that Kennecott would make a similar offer to the International Union of Mine, Mill and Smelters Workers (Ind.). Mine-Mill, meanwhile, submitted a proposal to the American Smelting & Refining Co. which provides a two-year wage package demand adding up to more than 26 cents an hour. But Mine-Mill intimated that this proposal was for bargaining purposes and indicated it wanted at least as much as Kennecott reportedly offered the USW.

Price Developments

Kennecott, which had been selling copper at 30.00c as long as it had some to sell, finally ran out of the metal and withdrew from the market as a seller on November 12. Consequently, the low side of the 30.00-33.00c range was wiped out by Kennecott's action.

Brass mills, who have been squeezed not only by the tight copper supply situation which has entailed higher copper costs but also by increased production expenses, increased their copper and brass mill product base prices about 0.50c to 1.00c a pound; brass mill scrap buying prices were not increased, since metal costs were not involved. The latest rise was initiated by Revere Copper and Brass on November 13 with other fabricators all joining the upward price parade by November 16.

Brass and bronze ingot makers on November 9 finally increased their ingot selling prices 0.75c to 3.00c a pound, depending on alloy, to reflect higher prices they had been paying for needed scrap grades for some time.

Scrap prices have eased off in day-to-day trading, reflecting the growing belief that settlements in the strikes in the domestic copper mining industry were "only around the corner." The one custom smelter operating marked down its scrap copper prices to a basis of 25.75c a pound for No. 2 heavy copper and wire, as of November 171.

Copper Statistics

The copper statistics for October were not as bullish as some factors had anticipated. October domestic refined copper figures follow in tons, with the September totals in parentheses: production, 44,218 (44,648); deliveries to fabricators, 68,648 (92,501); stocks end of month, 78,308 (81,514). World refined copper figures (inside U.S.A. and outside U.S.A. combined) follow for October, with the September totals in parentheses: production, 181,707 (187,294); deliveries to customers, 210,945 (232,282); stocks end of month, 330,438 (356,614).

Moderate Lead Business

Lead business of late was best described as moderate. Consumers were still following a conservative policy in making purchases, filling in needs where they have to but not very much disposed to cover future requirements. Sales were made at the spot price of 13.00c New York and 12.80c St. Louis, and also at the November average.

Refined lead deliveries, output and stocks outside the United States all increased in September over August. In the U.S., deliveries, output and stocks declined, reflecting the widespread strikes, according to figures compiled by the American Bureau of Metal Statistics.

Outside the U. S., deliveries of refined lead totaled 68,816 tons in September, an increase of 5,075 tons over the 63,741 tons delivered in August. Output outside the U. S. came to 88,930 tons in September, a gain of 1,898 tons over the 87,032 tons produced in August. At the close of September, stocks outside the U. S. stood at 133,043 tons, an increase of 8,792 tons over the 124,251 tons carried at the close of August.

In the U. S., refined lead deliveries in September totaled 37,853 tons, a drop of 24,638 tons from the 62,491 tons delivered in August. U. S. output in September came to 14,787 tons, a decline of 10,708 tons from the 25,495 tons produced in August. Refined lead stocks carried domestically at the end of September totaled 171,194 tons, a drop of 11,744 tons from the 182,938 tons held at the end of August.

The combined figures for the U. S. and outside the U. S. show refined lead deliveries of 106,669 tons in September, a drop of 19,563 tons from the 126,232 tons delivered in August. World output in September aggregated 103,717 tons, a decline of 8,810 tons from the 112,527 tons turned out in August. Combined world stocks at the end of September were 304,237 tons, a decrease of

2,952 tons from the 307,189 tons carried at the close of August.

Zinc Market Steady

The domestic zinc market was devoid of any important developments. More metal has been moving into consuming plants as galvanizing operations are stepped up, following the end of the strike in the steel industry. But the new business still leaves much to be desired. Prices were holding on the basis of 12.50c a pound East St. Louis for the Prime Western grade.

Announcement by the British Board of Trade that 3,000 tons of Good Ordinary Brand of zinc will be sold from the British Government's trading stocks had little effect on zinc prices in London or here. Trade sources in the U.K. said the tonnage involved was too small to alter materially prevailing prices. The U.K. zinc sales will be made to agents for the original supplies for delivery in November.

October statistics for zinc (all grades) follow in tons, with the September totals in parentheses: production, 63,938 (62,202); shipments to domestic consumers, 63,910 (57,971); stocks at end of month, 191,251 (193,036). Considering that the steel strike cut down the shipments of Prime Western grade to galvanizing plants, the October statistics for zinc made a remarkably good showing.

Tin Prospects

The end of the strike in the steel industry, at least until January 26 as the result of the Government's success in obtaining an 80-day "cooling off" period under the Taft-Hartley Law, did not bring with it any rise in consumer demand. Tin platers first wanted the tin they had purchased and which was sorted in warehouses. These stocks, as previously reported, may run as high as two to three months' supply.

Spot Straits tin closed at 101.00c a pound at New York on November 19, as against the last previous priced quoted in this space of 102.25c for October 15. The high for the October 15-November 17 period was the 102.25c registered on the first day of the period. The low of 101.00c was registered on the last day of the period.

Due to a lack of interest which has resulted from narrow price movements in the cash market, dealings in tin futures on the New York Commodity Exchange, Inc., as of November 20, were to be confined to liquidation of contracts, which consist of only one contract calling for delivery of Straits tin during December. When the liquidation operations are concluded, trading will be suspended until further notice, the Exchange announced.

Aluminum Labor Talks

Aluminum producers were forming a united front for the coming renewal of their contract negotiations with the United Steelworkers of America. Negotiators for Kaiser Aluminum agreed to coordinate their bargaining strategy with Aluminum Co. of America and Reynolds Metals Co. New bargaining was slated to start late in November. Agreement of Kaiser to go along with the other two big producers quieted fears that Kaiser might follow its sister company, Kaiser Steel Corp., in negotiating an industrial contract with the Steelworkers, and thus force the other aluminum companies into line.

Aluminum Production

U. S. primary aluminum production in October rose to 173,762 tons from 168,205 tons in September and 139,836 tons in October, 1958. Output for the first ten months of this year came to 1,636,377 tons as against 1,272,293 tons

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turned out in the like period of last year.

On November 20, however, Kaiser Aluminum closed down another potline at its 176,000-ton annual capacity aluminum reduction plant at Mead, Wash.; production at Mead has been trimmed to 62½ per cent of capacity.

Although primary aluminum ingot, 88½ per cent plus grade, was unchanged at 26.80c a pound, f.o.b., indications of softening in the market for the light metal was the fact that some warehouses in Los Angeles and San Francisco have reduced prices sharply on small orders of aluminum. The reductions were put into effect at Los Angeles on November 16, and affect sheets, plates and bars. San Francisco warehouses took similar price action on November 17. The reduction was put into effect through elimination of "price breaks" on orders of less than 5,000 pounds. The term "price breaks" refers to the variance of prices, according to the size of the order.

Palladium Price Hiked

A leading producer of palladium increased its palladium price $2 an ounce on November 9 to $22-$24 an ounce. Other sellers followed. It was the second advance in the palladium quotation within two weeks. On October 26 the same producer initiated an increase, also of $2 an ounce, which boosted the range to $20-$22 an ounce. The upward trend was attributed not only to improved domestic demand but also to a tighter supply situation.

Platinum Tone Firm

The platinum market displayed a firm tone with prices holding at $77 to $80 an ounce at the refiners' level. Metal in the outside dealer market also was quoted for sale within the same range. Some quarters believed an upward price trend was in the making, reflecting the tight supply situation plus a fairly good domestic demand. Contributing to the supply tightness has been the continued absence of Russia as a seller of platinum on the Continent.

Indicative of the domestic platinum market's strength were the high prices recently paid for Government-owned scrap platinum electrodes. At a recent sale by the Property Disposal Office at Fort Dix, N. J., Baker Platinum Division of Engelhard Industries and Leytess Metal & Chemical Corp. were the successful bidders for the 6,000 gross ounces of scrap offered. Baker bid $75.61 an ounce, less a $3 an ounce refining charge, for 4,500 gross ounces, and Leytess bid $76.50 an ounce, less a refining charge of $2.90 an ounce, for 1,500 gross ounces. Platinum content of the scrap averaged around 85 per cent, so that the refined metal in the Government sale probably will run to about 5,100 ounces.

Silver Unchanged

The New York silver quotation was unchanged at the 91.375c-an-ounce level, in effect since September 3, following a decline of 0.25c an ounce.

Quicksilver Weaker

The quicksilver market has weakened, reflecting a fairly good supply situation plus an almost complete lack of buying interest on the part of domestic consumers. Spot metal on November 12 dropped to a range of $215 to $217 per flask of 76 pounds, as against the last range of $224 to $226 per flask quoted in this space for October 8. The October 8 range was established following a rise of $1 per flask. The firmer tone at that time reflected the possibility of a long dock strike on the waterfront.

British Metal Markets

(Continued from Page 12)

of metal from its stock. It may be recalled that U. K. stockpile sales were suspended in February 1958 (when some 9,000 tons were still unsold) owing to the unsatisfactory state of the market. Incidentally, it is generally believed that the Government hold additional quantities to those it previously announced were available for sale.

However, early in November it was officially announced on the London Metal Exchange that (despite persistent rumors to the contrary) no release of metal has taken place since the last public tender. It was further intimated that a public announcement would be made before any tonnage is released. So far, most U. K. consumers seem to have been able to get enough metal for their requirements although one or two are reported to be somewhat anxious about their supply position over the next month or two. Presumably the Government would welcome the opportunity of disposing of its surplus metal at the present attractive prices but owing to the arrangements made at the United Nations conferenc in April it is obviously difficult, if not impossible, for it to act without full consultation with the other governments concerned. It is obvious, however, that the sooner some decisions are made as to whether, and when, the present restrictions on supplies are to be removed, the better it will be. Meanwhile, consumption generally is excellent, the brass trade having benefited materially from the substantial U. S. demand for semi-finished products in this country.

Washington Report

(Continued from Page 4)

petition was opposed by representatives of several importing firms.

Another Tariff Commission hearing has been scheduled in Washington for January 12, 1960, to deal with the entire lead-zinc problem. The Commission will report to Congress by March 31, 1960, concerning additional import controls required to return the U. S. industry to a sound condition.

Aluminum Scrap in News

Curbs on exports, rather than imports, were in the news when the Aluminum Smelters Research Institute urged the Commerce Department to limit aluminum scrap shipments abroad as "a serious drain of scarce materials." The Commerce Department rejected the request. The agency reported that, despite the fact that aluminum scrap exports for the first nine months of 1959 were 39,785,000 pounds, or about 40 per cent over the corresponding period of 1958, "it is not believed that the balance between domestic supply and demand has been affected adversely." The agency added, however, "in view of the concern expressed by the secondary smelting industry, the Department is keeping a close watch over the domestic supply-demand situation and export trends."

New Stockpiling Directive

Stockpiling, while no longer a major Government activity, still gets an occasional mention in Washington. Last month Leo A. Hoegh, Director of Civil and Defense Mobilization, issued a directive which will govern procurement of materials for the national stockpile for the remainder of the fiscal year ending June 30, 1960.

Authorized for open market purchase are jewel bearings, small diamond dies, and chrysotile asbestos.

Reynolds in Barter Deal

In another development related to stockpiling, it was disclosed that Reynolds Metals Company bauxite will be delivered during the next year to the Government in exchange for high protein wheat to be consumed by Caribbean Mills, Inc., in Haiti. The $6,000,000 to $6,500,000 barter commitment was obtained by Reynolds from Commodity Credit Corporation in Washington, D. C., according to a joint announcement by Walter L. Rice, president of Reynolds Haitian Mines, Inc., a subsidiary of Reynolds Metals, and Arthur D. Haas, president of Caribbean Mills, Inc. About 400,000 tons of bauxite is involved.

Daily Metal Quotations for October, 1959

The following quotations are taken from the Daily Metal Reporter*
(In Cents Per Pound)

OCTOBER	Copper					Tin		Lead		Zinc					Aluminum	Antimony	Silver
	Producers' Price Del. Conn.	Custom Smelters' or Outside Price	Electro f. o. b. Refinery	Lake Del.	Aver. Prompt Electrolytic Export Price f.a.s. N. Y.	Straits New York Spot	Prompt	New York	Outside St. Louis	Prime West. f. o. b. E. St. Louis	Prime West. Del. N. Y.	Brass Spec. f. o. b. E. St. Louis	High Grade Delivered	Spec. High Grade Delivered	30-Lb. Ingot 99½% Plus (f. o. b.)	Domestic Spot 99.5% f.o.b. Laredo	(Cents Per Ounce) New York
1	30.75	33.00	31.10	31.50	Nom.	103.125	103.125	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
2	30.75	33.00	31.10	31.50	Nom.	103.25	103.25	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
5	30.75	33.00	31.10	31.50	Nom.	103.375	103.375	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
6	30.75	33.00	31.10	31.50	Nom.	103.25	103.25	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
7	30.75	33.00	31.10	31.50	Nom.	103.125	103.125	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
8	30.75	33.00	31.10	31.50	Nom.	103.125	103.125	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
9	30.75	33.00	31.10	31.50	Nom.	102.375	102.375	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
13	30.75	33.00	31.10	31.50	Nom.	102.50	102.50	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
14	30.75	33.00	31.10	31.50	Nom.	102.375	102.375	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
15	30.75	33.00	31.10	31.50	Nom.	102.25	102.25	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
16	30.75	33.00	31.10	31.50	Nom.	101.875	101.875	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
19	30.75	33.00	31.10	31.50	Nom.	101.75	101.75	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
20	30.75	33.00	31.10	31.50	Nom.	101.625	101.625	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
21	30.75	33.00	31.10	31.50	Nom.	101.625	101.625	13.00	12.80	12.00	12.50	12.25	13.25	13.50	26.80	29.00	91.375
22	30.75	33.00	31.10	31.50	Nom.	101.625	101.625	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
23	30.75	Nom.	Nom.	31.50	Nom.	101.75	101.75	13.00	12.80	12.75	13.25	13.00	14.00	14.25	26.80	29.00	91.375
26	30.75	Nom.	Nom.	31.50	Nom.	101.625	101.625	13.00	12.80	12.75	13.25	13.00	14.00	14.25	26.80	29.00	91.375
27	30.75	Nom.	Nom.	31.50	Nom.	101.625	101.625	13.00	12.80	12.75	13.25	13.00	14.00	14.25	26.80	29.00	91.375
28	30.75	Nom.	Nom.	31.50	Nom.	101.625	101.625	13.00	12.80	12.75	13.25	13.00	14.00	14.25	26.80	29.00	91.375
29	30.75	Nom.	Nom.	31.50	Nom.	101.625	101.625	13.00	12.80	12.75	13.25	13.00	14.00	14.25	26.80	29.00	91.375
30	30.75	Nom.	Nom.	31.50	Nom.	101.50	101.50	13.00	12.80	12.75	13.25	13.00	14.00	14.25	26.80	29.00	91.375
AV.	**30.75**	**33.00**	**31.10**	**31.50**	**Nom.**	**102.238**	**102.238**	**13.00**	**12.80**	**12.233**	**12.733**	**12.483**	**13.483**	**13.733**	**26.80**	**29.00**	**91.375**
HI.	**31.50**	**33.00**	**32.60**	**31.50**	**Nom.**	**103.375**	**103.375**	**13.00**	**12.80**	**13.00**	**13.50**	**13.25**	**14.25**	**14.50**	**26.80**	**29.00**	**91.375**
LO.	**30.00**	**33.00**	**29.60**	**31.50**	**Nom.**	**101.50**	**101.50**	**13.00**	**12.80**	**12.00**	**12.50**	**12.25**	**13.25**	**13.50**	**26.80**	**29.00**	**91.375**

* When split quotations prevail the daily average price is listed. The highs and lows for the month take into consideration the levels reached at both sides of such ranges.

Copper Brands

Deliverable Against Commodity Exchange, Inc.

Brand or Marks	Producer	Grade
B. E. R.	American Smelting & Refining Co. (Baltimore, Md.)	Electrolytic
P. A.	American Smelting & Refining Co. (Maurer, N. J.)	Electrolytic
T	American Smelting & Refining Co. (Tacoma, Wash.)	Electrolytic
B. & M.	Anaconda Copper Mining Co.	Electrolytic
AE	Andes Copper Mining Co.	Electrolytic
BOLIDEN	Bolidens-Gruvaktiebolag	Electrolytic
C. C. R.	Canadian Copper Refiners Ltd. (Montreal)	Electrolytic
C de P Peru	Cerro de Pasco Corporation	Electrolytic
C. C. C.	Chile Copper Company	Electrolytic
F E C	Falconbridge Nickel Mines, Ltd.	Electrolytic
K U E	Kennecott Copper Corp.	Electrolytic
L. M. C.	Lewin Metals Corporation	Electrolytic
M U F	Mufulira Copper Mines, Ltd.	Electrolytic
N A	Norddeutsche Affinerie	Electrolytic
O R C	Ontario Refining Co., Ltd.	Electrolytic
A. L. S.	Phelps Dodge Refining Corp. (For Adolph Lewisohn Selling Corp.)	Electrolytic
L. N. S.	Phelps Dodge Refining Corp.	Electrolytic
P • D	Phelps Dodge Corporation	Electrolytic
N. E. C.	Raritan Copper Works	Electrolytic
R E C	Rhokana Corporation	Electrolytic
B O R	Rudnici Bakra i Topionice	Electrolytic
U M K	Union Miniere du Haut Katanga	Electrolytic
D R W	†United States Metals Refining Co.	Electrolytic
AMCO	†United States Metals Refining Co.	Electrolytic
OFHC	†United States Metals Refining Co.	Electrolytic
W E K	Zinnwerke Wilhelmsburg G.m.b.H.	Electrolytic

† Subsidiary, American Metal Climax, Inc.

Brand or Marks	Producer	Grade
C & H	Calumet & Hecla Consolidated Copper Co.	Lake
C. R.	Copper Range Company	Lake
Q. M. CO.	Quincy Mining Company	Lake

Brand or Marks	Producer	Grade
B. C. R.	British Copper Refiners, Ltd.	Fire Refined High Conductivity
N. H. E.	Nassau Smelting & Refining Co., Inc.	Fire Refined High Conductivity
A M CO R H C	United States Metals Refining Company	Fire Refined High Conductivity

Brand or Marks	Producer	Grade
• • • (3 Star)	Braden Copper Company	Fire Refined (other than Lake & Fire Refined High Conductivity)
K C M	Kennecott Copper Corporation	
M T D	Messina (Transvaal) Development Co.	
P. D. M. R	Phelps Dodge Corporation †United States Metals Refining Company	

Official List of Approved Refiners Whose CATHODES are deliverable against Commodity Exchange, Inc., Copper Contract

American Smelting & Refining Co.
Anaconda Copper Mining Co.
Andes Copper Mining Co.
Bolidens-Gruvaktiebolag
Canadian Copper Refiners, Ltd.
Cerro de Pasco Copper Corp.
Chile Copper Company
Consolidated Mining & Smelting Co.
Falconbridge Nickel Mines, Ltd.
Kennecott Copper Corp.
Lewin Metals Corp.
Mufulira Copper Mines, Ltd.
Norddeutsche Affinerie
Ontario Refining Co., Ltd.
Phelps Dodge Refining Corp.
Phelps Dodge Corporation
Raritan Copper Works
Rhokana Corporation
Rudnici Bakra i Topionice
Union Miniere du Haut Katanga
United States Metals Refining Co.
Zinnwerke Wilhelmsburg G.m.b.H.

Lead Brands

Refined At	Producer	Brand Mark
Federal, Ill., U. S.	American Smelting & Refining Co.	*ALTON
Carteret, N. J., U. S.	United States Metals Refining Co.	**A M CO
Monterrey, Mexico	American Smelting & Refining Co.	*ASARCO MONTERREY
Port Pirie, Australia	Broken Hill Associated Smelters	*B.H.A.S.
Indianapolis, Ind., U. S.	National Lead Co., American Lead Plant	†aBLUE ARROW AMERICAN LEAD CORP.
Braubach a/Rhein, Germany	Blei-und Silberhutte Braubach	*Braubach dopp. raff. Deutschland
Idaho, U. S.	Bunker Hill Smelter	*BUNKER "C" HILL
Orya, Peru	Cerro de Pasco Copper Corp.	*CERRO PERU
Collinsville, Ill., U. S.	St. Louis Smelting & Refining Co.	†aCHEMICAL ST. L. S. & R. CO.
Monterrey, N. L., Mexico	Compania Metalurgica Penoles, S.A.	**C.M.F. y A.M.
Alton, Ill., U. S.	St. Joseph Lead Company	*DOE RUN
Oker, Germany	Unterharzer Berg- und Huttenwerke	*HARZ 99.985, HARZ 99.9
Joplin, Mo., U. S.	Eagle-Picher Mining & Smelting Co.	*EAGLE-PICHER
Kamioka, Japan	Mitsui Mining Co.	*E.M.K.
Stolberg, Rhineland, Germany	Stolberger Zinc Aktiengesellschaft fur Bergbau und Hattenbetrieb	*Eschweiler raffine
Federal, Ill., U. S.	American Smelting & Refining Co.	*FEDERAL
Chicago, Ill., U. S.	Goldsmith Bros. Smelting & Refining Co.	†G B
Hoboken, Belgium	Societe Generale Metallurgizue de Hoboken	*H.E.R. Escaut
Alton, Ill., U. S.	St. Joseph Lead Company	*HERCULANEUM
Omaha, Neb., U. S.	International Smelting & Refining Co.	*ILR
Monsanto, Ill., U. S.	Lewin-Mathes Co.	†MONSANTO
Monteponi, Italy	Societa di Monteponi	*Monteponi
San Gavino Monreale, Sardinia, Italy	Montevecchio Societa Italiana del Piombo e dello Zinco	*Montevecchio
Hammond, Ind., U. S.	Metals Refining Company	†M R CO METALS REFINING CO.
Omaha, Neb., U. S.	American Smelting & Refining Co.	*OMAHA & GRANT
Overpelt, Belgium	Compagnie des Metaux d-Overpelt-Lommel et de Corphalie, S.A.	*Overpelt extra-raffine O.V.-L.L.-Dur.
Megrine, Tunis	Ste. Min. & Metall. de Penarroya	*Penarroya
Penarroya, Sopwith & Cartagena, Spain	Ete Min. & Met. de Penarroya	*Penarroya
Perth Amboy, N. J., U. S.	American Smelting & Refining Co.	*PERTH AMBOY
Genoa, Italy	Societa di Pertusola	*Pertusola
Alton, Ill., U. S.	St. Joseph Lead Company	*ST. JOE
Collinsville, Ill., U. S.	St. Louis Smelting & Refining Co.	†aST. L. S. & R. CO.
Selby, Calif., U. S.	American Smelting & Refining Co.	*SELBY
Trail, B. C., Canada	Consolidated Mining & Smelting Co. of Canada, Ltd.	*TADANAC
Baelen-Usines, Belgium	Ste. des Mines and Founderies de Zinc de la Vieille-Montagne Anglem	*Three Stars Vieille-Montagne Bar
Mezica, Yugoslavia	Central European Mines, Limited	*TRECA
Perth Amboy, N. J., U. S.	American Smelting & Refining Co.	*TSUMCO
Hoboken, Belgium	The Taumeb Corporation	*TSUMCO
Midvale, Utah, U. S.	United States Smelting, Refining & Mining Company	*USS CO
E. Chicago, Ind., U. S.	United States Smelting, Refining & Mining Company	*U S S CO ELECTRO
Norfolk, Va., U. S.	Virginia Lead Smelting Corp., The	†aVIRGINIA
Staten Island, N. Y., U. S. A.	Nassau Smelting & Refining Co.	Nassau Blue
Newark, N. J., U. S. A.	Hudson Smelting & Refining Co.	Hudson
Philadelphia, Pa., U. S. A.	Bers & Co., Inc.	Schuylkill

*Deliverable against: Commodity Exchange, Inc., Lead Contracts without Certificate of Assay.

** Subsidiary of American Metal Climax, Inc.

†Deliverable against Commodity Exchange, Inc., Lead Contracts with Certificate of Assay of one of the Official Assayers of the Exchange.

aSubsidiary of National Lead Co.

United States Duties on Principal Ore and Metal Imports

(Including Revisions in Effect June 30, 1957, Under Geneva Agreements)

(Quantities Are in Pounds Unless Otherwise Stated; n.s.p.f. Stands for "Not Specially Provided For.")

COPPER

NOTE — The excise tax of 4c a pound on copper (which was reduced to 2c a pound by the Geneva Trade Agreement) was suspended in April, 1947, until March 31, 1949, and on expiration it was further suspended until June 30, 1950. The tax was reimposed on July 1, 1950. It was suspended again on May 22, 1951, retroactive to April 1, 1951, and until February 15, 1953, and again until June 30, 1954. Suspension further extended to June 30, 1955, and again until June 30, 1958. If import tax is restored, the 1956 Geneva Agreement provides for 5% reductions effective on June 30 of 1956, 1957 and 1958, provided the price is above 24c; if the price is below 24c the 2c tax would prevail.

Copper ore and concentrates, usable as flux, etc., copper content	1.70c lb.
Copper ore and concentrates, product of Cuba, copper content	free
Copper ore and concentrates, product of Philippines, copper content	0.17c lb.
Copper ore and concentrates, copper content	1.70c lb.
Regulus, black, or coarse copper, and cement copper, copper content	1.70c lb.
Unrefined black, blister, and converter copper in pigs or converter bars, copper content	1.70c lb.
Refined copper in ingots, plates or bars, copper content	1.70c lb.
Copper rolls, rods or sheets	1¼c lb. (plus 1.70c lb. ††)
Copper seamless tubes and tubing	(plus 1.70c lb. ††)
Copper plain wire	(plus 1.70c lb. ††)
Copper brazed tubes†	4.50c lb. (plus 1.70c lb. ††)
Old and scrap copper, fit only for remanufacture: and scale and clippings, copper content	1.70c lb.

†† Copper content.

BRASS

Brass rods, sheets, plates, bars, strips, Muntz or yellow metal sheets, sheathing, bolts, piston rods, shafting and bronze rods, tubes and sheets	2c lb.
Brass tubes and tubing, seamless	2c lb.
Brass tubes, brazed, angles and channels	6c lb.
Brass and bronze wire	12½%

LEAD

NOTE — Import duties on lead-bearing ores, flue dust, and mattes of all kinds, lead bullion or base bullion, lead in pigs and bars, lead dross, reclaimed lead and antimonial lead were suspended February 12, 1952, and reimposed on June 26, 1952. Lead scrap duty was reimposed July 1, 1952.

Lead-bearing ores and mattes, n. s. p. f., lead content	¾c lb.
Bullion or base bullion, lead content	1 1/16c lb.
Pigs and bars, lead content	1 1/16c lb.
Reclaimed, scrap, dross, lead content	1 1/16c lb.
Babbitt metal and solder, lead content	1 1/16c lb.
Pipe, sheets, shot, glaziers' lead, and wire	1 5/16c lb.
Type metal and antimonial lead, lead content	1 1/16c lb.
White lead	1.05c lb.
Litharge	1¼c lb.
Red lead	15/16c lb.
Orange mineral	1c lb.

ZINC

NOTE — Import duties on zinc-bearing ores, and on zinc in blocks, pigs and slabs were suspended February 12, 1952, and reimposed on July 24, 1952. Tax on old zinc and dross and skimmings reimposed July 1, 1953.

Zinc-bearing ores, except pyrites containing not more than 3% zinc, zinc content	6/10c lb.
Zinc contained in zinc-bearing ores, n. e. s., not recoverable, zinc content	6/10c lb.
Zinc, old and worn out, fit only for remanufacture	¾c lb.
Dross and skimmings	¾c lb.
Zinc in blocks, pigs or slabs	7/10c lb.
Zinc in sheets	1c lb.
Zinc sheets, plated with nickel or other base metal, or solutions	1⅛c lb.
Zinc dust	7/10c lb.
Zinc die-casting alloys	12½%
Zinc oxide and leaded zinc oxides containing not more than 25% lead, dry	3/5c lb.
ground in or mixed with oil or water	1c lb.

MISCELLANEOUS METALS AND ORES

Aluminum, metal and alloys, crude, except alloys elsewhere provided for†	1.25c lb.
Aluminum scrap	free
Aluminum plates, sheets, bars, rods, circles, squares, etc.†	2.50c lb.
Antimony ore, antimony content	free
Antimony metal and regulus	2c lb
Antimony needle or liquidated	¼c lb
Antimony oxide	1c lb
Antimony sulphides	½c lb. & 12½%
Arsenic, metallic†	2.50c lb.
Arsenious acid or white arsenic	free
Bauxite, crude*	free
Bauxite, refined**	¼c lb
Bismuth	17½%
Bismuth salts and compounds	35%
Beryllium metal†	21%
Beryllium ore	free
Cadmium	3¾c lb.
Cadmium flue dust, cadmium content	free
Chrome ore or chromite	free
Chrome or chromium metal†	10½%
Cobalt metal	free
Cobalt ore and concentrates, cobalt content	free
Magnesium, metallic†	50%
Magnesium powder, sheets, wire†	17c lb. & 8½%
Magnesium alloys	20c lb. & 10%
Magnesium scrap	free
Manganese ores, containing over 10% manganese, manganese content	¼c lb., except Cuba, free
Molybdenum ore or concentrates, molybdenum content†	30c lb.
Nickel ore, matte and oxide	free
Nickel and alloys, nickel chief value, n. s. p. f., in pigs, ingots, shot, cubes, grains, cathodes, or similar forms	1¼c lb.
Nickel, bars, rods, plates, sheets, castings, strips, wire or electrodes	12½%
Nickel scrap	free
Nickel tubes, tubing	6¼%
(if cold rolled, drawn or worked — 2½% extra)	
Platinum, grain, nuggets, sponge and scrap, oz. troy	free
Platinum in ingots, bars, sheets, or plates, not less than ⅛ in. thick, oz. troy	free
Platinum, ores, platinum content, oz. troy	free
Quicksilver or mercury	25c lb.
Selenium and salts	free
Tantalum	12½%
Tin ore, cassiterite, and black oxide of tin, tin content	free
Tin in bars, blocks, pigs, grain, granulated, and scrap, and alloys, chief value tin, n. s. p. f.	free
Tungsten ore or concentrates, tungsten content	50c lb.

***Crude bauxite import duty suspended through July 15, 1960. **Under Public Law 25 alumina imported for use in aluminum production is free for entries from July 17, 1956 through July 15, 1960. †Tariff reduced 5% on June 30, 1958, under Geneva Agreement which expires on June 30, 1959.**

Copper Statistics Reported by Copper Institute

Combined Totals in U. S. A. and Outside U. S. A.

(In tons of 2,000 pounds)

	Crude Production		Refined	Deliveries to	Refined Stock	Stock Increases or Decreases		
	Primary	Secondary	Production	Customers	End of Period	Blister	Refined	Total
1957								
Total	2,897,719	123,270	3,035,588	2,853,307	458,340	—14,599	+103,920	+89,321
1958								
October	204,938	20,613	192,199	292,630	269,654	+33,352	+105,126	—71,774
November	227,916	17,755	230,109	261,097	236,774	+15,562	—32,880	—17,318
December	253,512	8,883	282,191	260,841	258,874	—19,796	+22,100	+ 2,304
Total	2,707,926	138,696	2,805,622	2,916,588	258,874	+41,000	—199,466	—158,466
1959								
January	257,682	12,377	270,995	248,574	284,545	— 936	+22,001	+21,065
February	244,405	12,737	264,018	243,741	304,303	— 6,876	+19,578	+12,882
March	270,248	17,019	285,425	270,768	319,241	+ 1,842	+14,938	+16,780
April	265,937	15,653	278,959	270,262	329,871	+ 2,631	+10,630	+13,261
May	279,629	11,695	283,024	266,378	350,343	+ 8,300	+20,472	+28,772
June	277,855	12,347	284,420	294,232	345,429	+ 5,782	— 4,914	— 868
July	256,729	9,198	274,752	231,138	374,519	+16,583	—15,035	+ 1,584
August	232,944	4,552	223,452	237,944	378,649	+11,543	—11,519	+ 24
September	186,837	7,652	187,294	232,282	354,926	+ 7,195	—23,723	—16,528
				(Oct. 1)	356,614			
October	183,534	11,019	181,707	210,945	330,438	+12,846	—26,176	—13,330

In U. S. A.

1957								
Total	1,116,380	112,060	1,616,964	1,277,946	181,024	.....	+60,379	.....
1958								
October	92,214	19,865	113,288	120,793	128,490	.....	—49,732	.....
November	96,369	16,755	128,048	131,188	93,596	.....	—34,894	.....
December	97,641	7,911	146,978	116,310	80,722	.....	—100,302	.....
Total	1,008,170	131,294	1,446,540	1,179,416	80,722	.....	—12,874	.....
1959								
January	95,542	11,284	137,361	114,425	80,780	.....	+ 58	.....
February	88,432	11,425	142,235	120,134	85,523	.....	+ 4,743	.....
March	101,410	16,120	140,928	124,220	85,952	.....	— 2,751	.....
April	98,376	14,287	137,490	135,233	74,323	.....	— 8,629	.....
May	104,236	9,933	135,031	135,135	86,132	.....	+11,809	.....
June	99,419	11,352	138,403	150,117	85,674	.....	— 458	.....
July	81,662	8,323	134,020	108,127	103,432	.....	+17,558	.....
August	51,327	3,994	83,677	90,123	94,109	.....	— 9,323	.....
September	19,503	6,578	44,468	92,501	79,826	.....	—14,283	.....
				(Oct. 1)	81,514			
October	21,060	9,926	44,218	68,648	78,308	.....	— 3,206	.....

Outside U. S. A.*

1957								
Total	1,783,119	11,210	1,418,624	1,575,361	277,316	.....	+43,541	.....
1958								
October	112,724	748	78,911	171,827	141,164	.....	—55,394	.....
November	131,334	980	102,061	129,909	143,178	.....	+ 2,014	.....
December	155,871	972	135,213	144,531	178,152	.....	+34,974	.....
Total	1,699,756	7,402	1,359,082	1,737,172	178,152	.....	—99,164	.....
1959								
January	162,140	1,093	133,634	134,149	203,765	.....	+21,943	.....
February	155,973	1,312	121,783	123,607	218,780	.....	+15,015	.....
March	168,838	899	144,497	146,548	236,232	.....	+17,502	.....
April	161,561	1,366	141,469	135,029	255,548	.....	+19,259	.....
May	175,393	1,762	147,993	131,243	264,211	.....	+ 8,663	.....
June	178,436	995	146,017	144,115	259,755	.....	— 4,456	.....
July	175,067	857	140,732	123,011	286,122	.....	+26,367	.....
August	181,617	558	142,276	147,821	284,540	.....	— 2,196	.....
September	167,354	1,047	142,646	139,781	275,100	.....	— 9,440	.....
October	162,474	1,093	137,489	142,297	252,130	.....	—22,970	.....

* Excluding Russia, Yugoslavia, Norway, Sweden, Japan and Australia.

Electrolytic Copper

Producers' Price, Del. Valley
Monthly Average Prices
(Cents Per Pound)

	1956	1957	1958	1959
Jan.	43.00	36.00	25.69	29.00
Feb.	44.03	33.318	25.00	29.972
Mar.	46.00	32.00	25.00	31.14
Apr.	46.00	32.00	25.00	31.50
May	46.00	32.00	25.00	31.50
June	46.00	30.955	25.36	31.50
July	41.56	29.25	26.125	30.587
Aug.	40.00	28.639	26.50	30.00
Sept.	40.00	27.031	26.50	30.571
Oct.	39.308	27.00	27.548	30.75
Nov.	36.00	27.00	29.00	....
Dec.	36.00	27.00	29.00	....
Aver.	41.992	30.183	26.31	....

Electrolytic Copper

Custom Smelters' Price, Del. Valley
Monthly Average Prices
(Cents Per Pound)

	1956	1957	1958	1959
Jan.	50.22	34.87	24.577	29.429
Feb.	52.07	32.273	23.557	30.361
Mar.	53.11	30.952	23.326	33.21
Apr.	48.88	31.24	23.66	32.84
May	44.221	30.163	23.865	32.00
June	40.00	29.60	25.52	31.477
July	38.14	28.39	29.231	29.52
Aug.	39.32	27.862	26.52	30.056
Sept.	39.00	25.948	26.355	33.00
Oct.	37.192	25.722	28.577	33.00
Nov.	35.95	25.435	29.829	....
Dec.	35.45	25.26	28.846	....
Aver.	42.797	28.93	25.905	....

Lake Copper

Producers' Price Delivered
Monthly Average Prices
(Cents Per Pound)

	1956	1957	1958	1959
Jan.	43.00	36.00	25.69	29.00
Feb.	43.783	33.182	25.00	30.00
Mar.	46.00	32.00	25.00	31.14
Apr.	46.00	32.00	25.00	31.50
May	46.00	32.00	25.00	31.50
June	46.00	30.955	25.00	31.50
July	41.68	29.25	25.75	30.587
Aug.	40.00	28.611	26.50	30.00
Sept.	40.00	27.00	26.50	31.107
Oct.	39.321	27.00	27.577	31.50
Nov.	36.00	27.00	29.00	....
Dec.	36.00	27.00	29.00	....
Aver.	41.975	30.162	26.251	....

Fabricators' Copper Statistics

(In tons of 2,000 pounds)

	Fabricators' Stocks of Refined Cop.	Unfilled Purchases of Refined by Fab. from Producers	Fabricators' Working Stocks	Unfilled Sales by Fabricators to Customers	Actual Copper Consmd. by Fabricators	Excess Fabricators' Stocks Over Orders Bkd.
1953						
Total	380,881	25,022	309,664	170,917	1,375,869	— 74,678
1954						
Total	360,526	58,125	304,619	136,581	1,231,840	— 22,549
1955						
Total	.....	.....	.....	.....	1,418,241	.....
1956						
Dec.	437,187	117,601	336,217	183,834	99,223	+ 34,737
Total	.....	.....	.....	.....	1,416,378	.....
1957						
Feb.	422,266	110,174	334,542	178,913	114,298	+ 18,985
Mar.	429,410	104,551	338,454	164,623	106,170	+ 30,884
Apr.	429,708	98,638	335,921	164,410	117,041	+ 28,015
May	434,852	92,943	336,697	170,476	115,355	+ 20,622
June	426,905	82,919	340,743	153,042	110,527	+ 16,039
July	432,918	85,728	341,684	144,410	77,991	+ 32,552
Aug.	429,627	82,768	344,315	144,375	110,323	+ 23,826
Sept.	425,168	80,436	344,530	144,538	106,927	+ 16,536
Oct.	420,130	80,774	341,869	138,420	119,161	+ 20,615
Nov.	428,520	68,249	345,832	128,719	98,725	+ 22,218
Dec.	430,171	75,627	347,465	138,631	83,067	+ 19,702
Total	.....	.....	.....	.....	1,279,086	.....
1958						
Jan.	445,514	57,917	348,426	123,756	94,642	+ 31,249
Feb.	452,673	52,342	351,035	128,330	86,625	+ 25,650
Mar.	448,125	71,693	346,875	141,387	83,694	+ 31,556
Apr.	450,442	76,602	347,607	145,623	79,613	+ 33,814
May	441,001	78,194	346,404	138,190	88,447	+ 34,601
June	433,526	72,383	330,301	145,162	109,011	+ 30,448
July	431,796	77,362	326,263	153,529	79,353	+ 29,366
Aug.	421,931	78,194	323,667	150,436	96,717	+ 26,022
Sept.	416,887	71,025	319,281	145,390	105,474	+ 28,941
Oct.	399,113	91,019	315,929	156,692	138,017	+ 17,511
Nov.	419,914	88,580	328,238	157,799	110,487	+ 22,457
Dec.	447,123	90,401	326,438	177,869	92,573	+ 35,217
Total	....	....	....	....	1,165,364	....
1959						
Jan.	457,387	101,182	337,761	172,698	108,556	+ 44,070
Feb.	459,046	123,321	390,522	183,113	116,565	+ 58,732
Mar.	449,441	130,785	334,904	211.547	133,259	+ 33,775
Apr.	463,582	125,250	337,282	204,618	120,680	+ 46,932
May	474,657	133,694	338,835	210,424	124,060	+ 59,092
June	492,072	111,229	343,585	191,875	133,702	+ 67,841
July	518,699	110.367	357.474	193,338	81,500	+ 68,254
Aug.	487,259	97,786	359,049	191,476	121,563	+ 34,520
Sept.	462,880	111,675	360,760	204,574	116,880	+ 9,221

Scrap Copper Receipts by Custom Smelters and Refineries in United States*

(In Short Tons)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Jan.	15,763	6,640	4,528	6,486	9,859	11,047	14,322	17,506	16,024	14,511
Feb.	12,500	5,153	3,633	10,337	8,490	15,198	14,497	11,145	9,518	14,712
Mar.	13,538	7,912	5,243	19,991	9,738	12,198	15,921	13,934	11,783	19,522
Apr.	12,304	8,553	6,214	16,583	9,004	13,162	17,233	14,288	15,279	17,525
May	8,749	8,458	8,033	10,857	8,687	15,133	20,805	12,397	13,989	13,960
June	20,523	8,628	4,425	10,945	13,309	14,765	14,758	11,949	13,945	15,065
July	10.010	6 642	5,188	9,063	10,260	9,988	12 632	8,926	12,185	11,144
Aug.	10,452	6,113	5,003	7,137	10,100	12,197	12,510	11,645	11,896	7,468
Sept.	4,903	3,561	4,667	9.042	10,641	15,037	9 518	9,756	9 268	10,070
Oct.	9,459	3,336	4,602	10 065	11,662	12,897	15,570	13,151	23,088	12,860
Nov.	9,237	3,179	4,724	7,815	10,879	9,865	11,369	11,146	16,425	....
Dec.	7,178	4,538	6,208	11,476	14,876	13,180	14,613	11,237	10,796	....
Total	142,067	71,812	62,470	129,798	127,449	154,714	173,748	147,080	164,196	....

* As compiled by Copper Institute.

Brass and Bronze Ingot Monthly Shipments

(NET TONS)

The following figures showing the combined shipments of ingot brass and bronze are compiled by the Ingot Brass and Bronze Industry and represent in excess of 95 per cent of the deliveries of the entire industry.

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Jan.	19,456	18,874	28,416	28,315	23,423	20,661	25,201	27,736	25,681	20,468	22,046
Feb.	15,026	18,487	27,168	24,211	25,429	19,920	25,349	24,949	20,769	17,413	23,746
Mar.	14,550	22,494	31,997	23,890	28,256	23,653	29,713	28,310	21,948	18,825	26,109
Apr.	10,695	22,118	30,473	22,547	25,044	24,746	27,641	25,808	23,507	18,009	26,115
May	11,114	23,643	33,267	21,740	21,660	22,269	23,708	23,437	22,037	17,191	23,967
June	9,696	25,093	33,817	21,274	20,818	22,348	23,141	18,842	18,888	17,962	22,922
July	10,220	21,609	32,016	18,947	19,321	17,074	18,513	17,364	16,695	16,658	20,346
Aug.	14,194	29,689	25,285	21,807	20,156	21,684	27,013	23,812	19,654	17,882	21,741
Sept.	16,208	28,811	22,285	22,770	21,463	22,464	26,349	20,929	19,670	20,540	22,685
Oct.	18,026	32,240	23,124	25,811	22,280	24,080	25,228	23,045	22,800	23,225	23,067
Nov.	18,488	31,748	23,544	23,441	21,806	23,061	25,102	21,818	19,767	20,758	....
Dec.	17,950	28,575	20,987	22,983	20,541	21,274	21,448	18,046	16,875	18,676	....
Total	175,643	303,563	332,378	277,736	271,251	263,233	298,406	274,096	248,297	227,607	....
Aver.	14,637	25,297	27,615	23,145	22,694	21,936	24,867	22,841	20,681	18,133	....

Mine Production of Copper in United States

(U. S. Bureau of Mines)
(In short tons)

	Eastern	Missouri	Western	Total
1956				
Ttl.	79,681	2,130	1,018,496	1,100,307
1957				
Dec.	6,962	67	81,080	88,109
Ttl.	79,369	1,800	995,753	1,076,922
1958				
April	7,035	161	76,911	84,107
May	6,522	152	71,717	78,391
June	5,801	155	62,296	68,252
July	4,188	132	56,672	61,222
Aug.	5,570	127	61,342	67,039
Sept.	5,312	114	77,561	82,987
Oct.	7,002	60	85,075	91,518
Nov.	6,617	60	87,379	94,056
Dec.	6,614	70	88,070	94,514
Ttl.	76,849	1,250	902,021	980,304
1959				
Jan.	6,590	126	90,386	97,102
Feb.	5,883	130	81,889	87,902
Mar.	6,513	140	91,499	98,152
Apr.	7,240	150	93,295	100,685
May	7,007	110	94,277	101,394
June	7,245	124	86,861	94,230
July	6,763	124	80,488	87,375
Aug.	6,813	116	47,474	54,403
Sept.	6,655	123	19,159	25,937

Average Custom Smelters' Scrap Buying Prices

(Cents per pound for carload lots del. consumers' works)

	No. 1 Copper Scrap	No. 2 Copper Scrap	Light Copper Scrap	Refinery Brass*
1958				
July	22.52	21.02	18.77	20.26
Aug.	22.62	21.12	18.87	20.12
Sept.	22.37	20.87	18.62	19.87
Oct.	24.80	23.30	21.05	22.30
Nov.	25.597	24.097	21.847	23.097
Dec.	24.356	22.856	20.606	21.856
Aver	21.788	20.282	18.035	18.047
1959				
Jan.	25.29	23.79	21.54	22.79
Feb.	26.42	24.92	22.67	24.11
Mar.	28.79	27.29	25.04	26.79
Apr.	28.04	26.50	24.29	26.04
May	27.81	26.31	24.06	25.81
June	26.80	25.30	23.05	24.80
July	25.14	23.64	21.39	23.14
Aug.	25.762	24.762	22.012	23.762
Sept.	26.369	24.869	22.319	24.369
Oct.	27.929	25.405	23.155	24.905

*Of dry content for material having a dry copper content in excess of 60%.

Brass Ingot Makers' Scrap Copper Buying Prices

(Average Prices)
(Cents per pound del. refinery for 60,000 lbs. of each grade)

	No. 1 Copper Scrap	No. 2 Copper Scrap	No. 1 Composition	Heavy Yellow Brass
1958				
Aug.	22.62	21.12	19.11	13.80
Sept.	22.37	20.87	18.88	12.90
Oct.	24.80	23.30	20.51	14.938
Nov.	25.597	24.097	20.182	14.125
Dec.	24.356	22.856	19.038	13.038
Aver.	21.777	20.277	18.653	13.024
1959				
Jan.	25.29	23.79	19.70	13.982
Feb.	26.42	24.92	21.08	15.08
Mar.	28.79	27.29	22.85	16.85
Apr.	28.04	26.54	21.69	15.70
May	27.81	26.31	21.17	15.17
June	26.80	25.30	21.159	15.307
July	25.14	23.64	20.13	14.47
Aug.	25.762	24.262	21.286	14.81
Sept.	26.369	24.869	22.304	16.50
Oct.	27.595	25.405	22.19	16.048

Lead Statistics Reported by American Bureau of Metal Statistics

Lead Refineries in U. S. A. and Outside U. S. A.

(Recoverable Lead Content in Tons of 2,000 Pounds)

Combined U. S. A. and Outside U. S. A.

	REFINED PRODUCTION			DELIVERIES			STOCKS		
1958	Pig	Antimonial Lead Content	Total	Pig	Antimonial Lead Content	Total	Pig	Antimonial Lead Content	Total
Dec. ..	129,461	10,898	140,359	90,498	8,583	99,081	313,232	21,233	334,465
Total ..	1,485,282	106,383	1,591,665	1,307,390	102,697	1,410,087	.....	.....	.....
1959									
Jan. ..	129,604	9,755	139,359	114,038	10,014	124,052	328,719	20,974	349,693
Feb. ..	114,528	8,944	123,472	90,915	9,094	100,009	347,455	20,824	368,279
Mar. ..	123,549	8,747	132,296	118,050	9,403	127,453	362,493	20,168	382,661
Apr. ..	127,995	10,398	138,393	146,409	10,345	156,754	334,178	20,221	354,399
May ..	130,046	10,216	140,262	144,988	8,566	153,554	310,042	21,871	331,913
June ..	130,142	10,960	141,102	146,505	12,894	159,399	285,489	19,938	305 427
July ..	113,394	8,721	122,115	97,008	7,879	104,887	300,674	20,780	321,454
Aug. ..	105,433	7.094	112,527	114,715	11,517	126 232	290,532	16,357	307,189
Sept. ..	98,966	4,751	103,717	101,415	5,254	106,669	288,383	15,854	304,237

U. S. A.

1958									
Dec ..	39,504	4,307	43,811	31,869	3,737	35,606	239,049	13,417	252,466
Total ..	473,208	46,985	520,193	589,528	49,893	639,421	.....	.....	.....
1959									
Jan. ..	40,110	3,365	43,475	48,311	4,492	52,803	244,870	12,426	257,296
Feb. ..	35,084	4,145	39,229	40,881	4,073	44,954	254,229	12,961	267,190
Mar. ..	35,140	3,868	39,008	49,742	4,279	54,021	248,166	12,744	260,910
Apr. ..	35,072	5,167	40,239	60,312	5,072	65,384	234,187	13,578	247,765
May ..	34,483	4.359	38 842	78,398	4.598	82,996	209.558	13,950	223.508
June ..	31,786	5,296	37,082	75,563	7,122	82,685	177,603	12,424	190,027
July ..	30,098	2,646	32,744	31,991	2,153	34.144	187.526	13,082	200,608
Aug. ..	23,404	2,091	25,495	55,094	7,397	62,491	174,959	7,979	182,938
Sept. ..	14,699	88	14,787	37,310	543	37,853	163,467	7,727	171,194

Outside U. S. A.

1958									
Dec. ..	89,957	6.591	96,548	58,629	4,846	63,475	74,183	7,816	81,999
Total ..	1,012,074	59,398	1,071,472	717,862	52,804	710,666	.....	.....	.....
1959									
Jan ..	89,494	6,390	95,884	65,727	5,522	71,249	83,849	8,548	92,397
Feb. ..	79,444	4,799	84,243	50,034	5,021	55,055	93,226	7,863	101.089
Mar. ..	88,409	4,879	93,288	68,308	5,124	73,432	114,327	7,424	121,751
Apr. ..	92,923	5,231	98,154	86,097	5,273	91,370	99,991	6,643	106.634
May ..	95.563	5.857	101.420	66.590	3.968	70,558	100,484	7,921	108.405
June ..	98,356	5,664	104,020	70,942	5,772	76,714	107,886	7,514	115,400
July ..	83,296	6,075	89,391	65,017	5,726	70.743	113.148	7,698	120.846
Aug. ..	82,029	5,003	87,032	59,621	4,120	63,741	115,873	8,378	120.846
Sept. ..	84,267	4,663	88,930	64,105	4,711	68,816	124,916	8,127	133,043

Summary of Lead Statistics for United States

Recoverable Lead Content In Tons of 2000 Pounds	Stocks (end of period)					Smelter Receipts			
	Raw Material at Smelter	Base Bullion		Refined Pig and Antimonial	Total	Primary Origin		Scrap	Total
		At Smelter & Transit	At Refinery and Process			U.S.A.	Outside U.S.A.		
1958									
October	58,863	4,773	29,833	220,063	313,532	19,630	9,205	3,699	32,534
November ;.	60,222	3,573	30,208	230,080	324,083	23,603	15,932	3,869	43.404
December ..	68,197	4,489	28,955	252,466	354,107	25,544	18,921	4,090	43,555
Total	....	....	....	.....	.....	297,687	191,415	29,080	518,182
1959									
January ...	69,015	4,243	31,577	257,296	362,131	24,931	19,185	3,167	47,283
February ..	58,921	2,919	35,062	267,190	364,092	22,934	8,435	1,772	33,141
March	65,478	4,283	33,815	260,910	364,486	22,258	21,368	1,426	45,052
April	61,779	4,424	31,596	247,765	345.564	22.868	11,344	1,214	35.426
May	52,115	3,370	32,693	223.508	311,686	22,072	5,330	2,008	29.410
June	55,472	7,454	27,020	190,027	279.973	24.610	12.690	2,444	39,744
July	51,091	7.009	31,461	200,608	290,169	20,029	11,799	2,065	33,893
August	49,262	9,637	24,994	182,938	266 931	20 958	2.703	1,428	25,089
September .	61,420	9,609	29,012	171,194	271,235	13,725	11,675	753	26,153

1958	Smelter Production	Refined Productions			Deliveries to U. S. Fabricators including imports from sources reporting to ABMS		
		Pig	Antimonial	Total	Pig	Antimonial	Total
October	41,975	40,225	5,153	45,378	70,580	4,455	75,035
November	41,365	36,572	3,621	40,193	44,834	4,181	49,015
December	39,972	39,504	4,307	43,811	31,869	3,737	35,606
Total	512,323	473,208	46,985	520,193	589,528	49,893	639,421
1959							
January	45,938	40,110	3,365	43,475	48,311	4,492	52,803
February	40,655	35,084	4,145	39,229	40,881	4,073	44,954
March	38,138	35,140	3,868	39,008	49,742	4,279	54,021
April	38,614	35,072	5,167	40,239	60,312	5,072	65,384
May	38,722	34,483	4,359	38,842	78,398	4,598	82 996
June	35,807	31,786	5,296	37,082	75,563	7,122	82,685
July	37,328	30,098	2,646	32,744	31,991	2,153	34,144
August	26,698	23,404	2,091	25,495	55,094	7,397	62,491
September	13,995	14,699	88	14,787	37,310	543	37,853

United States Lead Statistics of Primary Refineries

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	Stock At Beginning	Production Primary & Secondary	Total Supply	Stock At End	Domestic Shipments
1954	81,152	551,618	632,770	92,719	475,551
1955	28,855	547,153	639,872	31,089	531,339
1956					
Total	....	613,293	644,382	....	529,484
1957					
Total	....	604,353	645,534	....	463,060
1958					
January	91,598	47,665	139,263	101,206	33,422
February	101,206	47,133	148,339	119,522	23,832
March	119,522	43,441	162,963	128,754	28,885
April	128,754	40,984	169,738	143,136	22,172
May	143,136	47,487	190,623	155,121	30,021
June	155,121	44,636	199,757	163,504	32,078
July	163,504	38,827	202,331	164,860	31,948
August	164,860	39,520	204,380	169,302	34,254
September	169,302	43,269	212,571	170,666	41,657
October	170,666	45,467	216,133	169,435	46,647
November	169,435	40,485	209,920	179,321	30,591
December	179,321	44,042	223,363	198,538	24,852
Total	....	522,956	614,554	....	380,359
1959					
January	198,508	43,652	242,160	208,874	33,035
February	208,874	39,498	248,372	214,946	30,685
March	214,946	39,238	254,184	210,524	40,980
April	210,524	40,606	251,130	197,823	52,469
May	197,823	39,101	236,924	171,577	65,207
June	171,577	37,459	209,036	133,235	75,465
July	133,235	32,882	166,117	142,694	22,380
August	142,694	25,589	168,283	124,259	43,850
September	124,259	14,801	139,060	117,296	21,795

In instances where the figures are not in balance it is due to shipments to other than domestic consumers.

Industrial Classification of Domestic Lead Shipments

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	Cable	Amm.	Foil	Batt'y	Brass Making	Sundries	Jobbers	Unclassified
1955								
Total	72,418	27,599	2,622	88,461	3,960	52,994	13,034	270,251
1956								
Total	80,360	24,501	1,435	70,614	3,158	56,851	13,213	274,716
1957								
Mar.	5,956	752	...	6,479	686	4,614	1,064	18,674
April	6,731	2,250	....	6,242	909	2,958	1,040	17,453
May	6,976	2,200	120	4,705	270	3,871	634	16,558
June	3,726	2,250	75	3,762	666	5,071	1,087	20,620
July	5,249	1,650	105	5,332	566	5,310	1,110	19,260
Aug.	5,406	2,250	220	6,165	650	6,246	1,403	27,066
Sept.	4,880	2,700	295	6,722	850	5,782	891	29,739
Oct.	3,671	3,300	205	5,973	881	4,203	847	21,367
Nov.	2,950	2,500	85	3,126	493	3,800	706	18,533
Dec.	2,499	1,350	36	2,820	270	2,607	529	13,997
Total	58,444	25,452	1,691	64,761	7,420	53,284	11,127	240,881
1958								
Jan.	2,938	550	70	4,775	521	5,173	801	18,594
Feb.	2,899	1,750	70	5,124	90	1,643	888	11,368
Mar.	3,133	1,200	35	4,711	681	3,149	908	15,068
April	3,207	900	70	3,138	580	2,831	533	10,913
May	3,216	1,850	35	4,671	866	3,071	1,027	15,285
June	3,463	1,950	35	2,767	480	4,217	1,716	17,450
July	3,169	1,250	275	3,936	515	4,157	1,052	17,594
Aug.	3,481	2,415	70	4,992	400	6,399	100	16,397
Sept.	4,132	2,290	320	5,775	848	6,771	1,747	19,774
Oct.	3,243	2,450	...	4,548	285	6,210	1,641	28,270
Nov.	3,690	2,150	50	6,527	360	4,887	822	12,105
Dec.	2,267	2,100	50	6,216	215	2,578	652	10,774
Total	38,838	20,855	1,080	57,180	5,841	51,086	11,882	193,592
1959								
Jan.	2,284	2,100	100	5,594	161	3,545	727	18,524
Feb.	2,988	1,225	50	5,254	735	2,706	931	16,796
Mar.	3,156	1,850	105	5,905	378	6,006	2,185	21,395
April	3,686	2,150	35	7,410	691	5,356	1,966	31,355
May	4,054	2,900	35	6,870	475	7,990	2,843	40,040
June	5,272	3,210	70	12,515	180	8,009	3,663	42,546
July	850	295	70	2,570	315	3,166	997	14,117
August	3,268	1,150	205	3,073	410	6,640	1,921	27,183
September	1,003	....	35	3,401	255	2,296	1,484	13,321

Lead Prices at New York

(Common Grade)
Monthly Average Prices
(Cents per pound)

	1956	1957	1958	1959
Jan.	16.16	16.00	13.00	12.619
Feb.	16.00	16.00	13.00	11.583
Mar.	16.00	16.00	13.00	11.42
Apr.	16.00	16.00	12.00	11.20
May	16.00	15.385	11.712	11.905
June	16.00	14.32	11.24	12.00
July	16.00	14.00	11.00	12.00
Aug.	16.00	14.00	10.85	12.286
Sept.	16.00	14.00	10.89	13.00
Oct.	16.00	13.704	12.673	13.00
Nov.	16.00	13.50	13.00	....
Dec.	16.00	13.00	13.00	....
Aver.	16.013	14.66	12.114	....

Lead Sheet Prices

(To Jobbers, Full Sheets)
Monthly Average Prices)
(Cents per pound)

	1956	1957	1958	1959
Jan.	21.66	21.50	18.50	18.119
Feb.	21.50	21.50	18.50	17.083
Mar.	21.50	21.50	18.50	16.92
Apr.	21.50	21.50	17.50	16.70
May	21.50	20.885	17.212	17.405
June	21.50	19.82	16.74	17.50
July	21.50	19.82	16.50	17.50
Aug.	21.50	19.50	16.35	17.786
Sept.	21.50	19.50	16.39	18.50
Oct.	21.50	19.204	18.173	18.50
Nov.	21.50	19.00	18.50	....
Dec.	21.50	18.50	18.50	....

Battery Shipments

The following table shows replacement battery shipments in the United States as compiled by the Business Information Division of Dun & Bradstreet, Inc., for the Association of American Battery Manufacturers:

(In thousands of units)

	1956	1957	1958	1959
Jan.	2,058	2,638	2,004	2,672
Feb.	1,340	1,961	1,803	1,791
Mar.	1,348	1,254	1,577	1,376
Apr.	1,368	1,178	1,242	1,439
May	1,761	1,605	1,454	1,593
June	1,807	1,878	1,773	2,116
July	2,178	2,469	2,101	2,556
Aug.	2,571	2,856	2,333	2,728
Sept.	2,711	2,688	2,704	2,893
Oct.	3,015	3,042	2,976	....
Nov.	2,592	2,359	2,262	....
Dec.	2,265	2,015	3,036	....
Total	25,014	25,943	25,265	....

Lead Stocks at Primary U. S. Smelters and Refiners

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	In ore and matte and in process at smelteries	—In base bullion (lead content)— At smelteries & refineries	In transit to refineries	In process at refineries	Refined pig lead	Antimonial lead	Total Stocks
1957							
Aug. 1..	97,111	11,479	2,532	22,917	59,348	8,661	202,048
Sept. 1.	84,205	13,029	2,667	22,439	51,080	9,553	182,973
Oct. 1..	80,662	11,905	3,175	20,351	44,467	10,215	170,775
Nov. 1..	76,230	14,220	2,538	18,695	47,460	11,581	170,724
Dec. 1..	65,341	11,646	3,547	21,867	59,755	11,119	173,275
1958							
Jan. 1..	79,362	11,019	2,779	23,154	79,741	11,857	207,912
Feb. 1..	79,738	11,510	3,678	24,535	88,517	12,689	220,667
Mar. 1..	79,588	9,546	3,670	22,834	107,213	12,309	235,250
Apr. 1..	83,185	10,692	2,187	21,766	116,610	12,144	246,584
May 1..	86,053	11,838	2,138	20,524	130,668	12,468	263,689
June 1..	79,482	11,059	2,010	20,188	141,967	13,154	267,860
July 1..	80,060	9,012	1,570	22,092	150,648	12,856	276,238
Aug. 1..	83,347	12,438	860	21,615	154,378	10,482	283,379
Sept. 1.	77,416	14,767	1,176	20,444	158,413	10,889	283,105
Oct. 1..	72,724	14,797	2,223	18,125	159,662	11,004	278,535
Nov. 1..	61,819	11,492	1,086	19,041	157,385	12,050	262,873
Dec. 1..	62,960	11,072	1,565	20,941	167,493	11,828	275,859
1959							
Jan. 1..	72,378	10,917	1,767	19,746	185,913	12,595	303,316
Feb. 1..	72,832	10,565	1,889	21,317	197,085	11,789	315,477
Mar. 1..	62,383	11,707	1,447	21,479	202,835	12,111	311,962
Apr. 1..	68,433	14,352	350	20,575	198,459	12,065	314,234
May 1..	64,538	12,373	624	20,507	184,468	13,355	295,865
June 1..	55,223	12,239	766	20,391	157,981	13,596	260,196
July 1..	58,451	13,270	943	19,468	120,914	12,321	225,367
Aug. 1..	53,115	18,379	158	18,021	129,551	13,143	232,367
Sept. 1.	50,007	17,389	....	15,638	116,344	7,915	207,293
Oct. 1..	61,910	17,925	....	14,932	109,527	7,769	212,063

Receipts of Lead in Ore and Scrap

By U. S. Smelters (a)

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	——Receipts of lead in ore—— United States	Foreign	Total	Receipts of lead in scrap etc. (b)	Total receipts in ore, & scrap
1953 Total	351,183	155,788	506,971	42,994	549,965
1954 Total	336,291	158,081	494,372	49,864	544,236
1955 Total	341,595	172,966	514,561	42,996	557,557
1956					
Total	368,499	192,318	560,817	55,925	616,792
1957					
August	29,225	18,774	47,999	3,190	51,189
September	26,479	13,757	40,236	4,375	44,611
October	29,342	13,782	43,124	4,386	47,510
November	25,809	17,251	43,060	3,258	46,318
December	27,105	26,610	53,715	3,791	57,506
Total	356,409	206,901	563,310	42,537	605,847
1958					
January	25,537	22,097	47,634	3,507	51,141
February	23,789	16,400	40,189	2,184	42,373
March	21,735	20,038	41,773	3,154	44,927
April	25,104	15,821	40,925	1,913	42,838
May	27,427	10,228	37,655	1,867	39,522
June	28,577	13,811	42,388	1,366	43,754
July	22,289	19,692	41,891	1,615	43,596
August	22,984	13,043	36,027	1,252	37,279
September	20,654	14,576	35,230	1,765	36,995
October	18,678	9,093	27,771	3,577	31,348
November	24,024	14,541	38,565	3,933	42,498
December	24,366	18,804	43,170	3,982	47,152
Total	285,164	188,144	473,308	30,115	503,423
1959					
January	24,304	19,449	43,753	3,138	46,891
February	22,253	8,660	30,913	1,747	32,660
March	21,897	21,012	42,909	1,328	44,237
April	22,339	10,998	33,337	1,196	34,533
May	21,645	5,202	26,847	1,930	28,777
June	23,634	12,368	36,002	2,431	38,433
July	19,165	11,695	30,860	2,199	33,059
August	19,971	2,821	22,792	1,009	23,801
September	13,591	3,465	17,056	32	17,088

(a) Receipts of lead in ore are computed on the basis of recoverable lead. Owing to the estimational factor in this, which is probably on the low side, and also to the possibility that some lead receipts may escape attention, these monthly totals probably underrun the actual production of pig lead. (b) Inclusive only of scrap smelted in connection with ore, plus some scrap received by primary refiners.

N. Y. Lead Price Changes

(Effective Date)

1951		Apr. 1	13.75
Oct. 2	**19.00	Apr. 12	14.00
1952		June 2	14.25
Apr. 29	18.00	June 15	14.00
May 2	17.00	Aug. 25	14.25
May 12	15.00	Sept. 7	14.50
June 23	15.50	Sept. 15	14.75
June 24	16.00	Oct. 4	14.875
Oct. 7	15.00	Oct. 5	15.00
Oct. 14	14.00	1955	
Oct. 22	13.50	Sept. 23	15.00-15.50
Nov. 3	14.00	Sept. 26	15.50
Nov. 10	14.20	Dec. 29	16.00
Nov. 11	14.50	1956	
Nov. 20	14.25	Jan. 4	15.50
Nov. 24	14.00	Jan. 13	16.00
Dec. 22	14.25	1957	
Dec. 29	14.50	May 9	15.50
Dec. 31	14.75	May 16	15.00
1953		June 11	14.00
Jan. 7	14.50	Oct. 14	13.50
Jan. 12	14.00	Dec. 2	13.00
Feb. 2	13.50	1958	
Mar. 4	13.00	Apr. 1	12.00
Mar. 10	13.50	May 14	11.50
Apr. 7	13.00	June 3	11.00
Apr. 16	12.50	June 18	11.50
Apr. 21	12.00	July 1	11.00
Apr. 29	12.50	Aug. 13	10.75
May 18	12.75	Sept. 17	11.00
May 19	13.00	Sept. 30	11.50
May 26	13.15	Oct. 2	12.00
June 11	13.50	Oct. 8	12.50
July 20	13.75	Oct. 14	13.00
July 23	14.00	1959	
Sept. 16	13.50	Jan. 21	12.00
1954		Feb. 11	11.50
Jan. 18	13.00	Feb. 24	11.00
Feb. 18	12.50	Mar. 5	11.50
Mar. 9	12.75	April 1	11.00
Mar. 10	13.00	April 20	11.50
Mar. 26	13.25	May 7	12.00
Mar. 29	13.50	Aug. 24	13.00

**OPS Ceiling.

Antimonial Lead Stocks at Primary Refineries

(A.B.M.S.)

(In tons of 2,000 pounds)

End of	1956	1957	1958	1959
Jan. ..	8,389	10,487	12,689	11,789
Feb. ..	9,095	10,220	12,309	12,111
Mar. ..	10,289	9,794	12,144	12,065
Apr. ..	10,690	9,391	12,468	13,355
May ..	10,902	9,799	13,154	13,596
June .	9,452	9,503	12,856	12,321
July ..	10,924	8,661	10,482	13,143
Aug. ..	10,074	9,553	10,889	7,915
Sept. .	11,181	10,215	11,004	7,769
Oct. ..	11,382	11,581	12,050	....
Nov. ..	11,832	11,119	11,828	....
Dec. ..	11,746	11,857	12,595	....

Antimonial Lead Production by Primary Refineries

(A.B.M.S.)

(In tons of 2,000 pounds)

End of	1956	1957	1958	1959
Jan. ..	5,045	5,113	3,743	3,541
Feb. ..	5,888	5,468	3,657	4,415
Mar. ..	5,526	5,091	3,527	4,098
Apr. ..	5,818	6,183	3,655	5,533
May ..	5,405	6,978	4,827	4,618
June ..	4,456	4,466	3,992	5,671
July ..	3,853	5,372	2,775	2,784
Aug. ..	5,343	7,967	5,244	2,185
Sept. .	6,709	7,574	4,761	102
Oct. ..	5,378	6,148	5,849	....
Nov. ..	6,993	3,791	3,913	....
Dec. ..	5,766	3,290	4,539	....
Total	66,180	67,541	50,482	....

Lead Imports and Exports By Principal Countries

(A.B.M.S.)

(In metric tons)

Reported in pigs, bars, etc.; except where otherwise noted.

	1959		
	June	July	Aug.
IMPORTS			
U. S.* (s.t.)	26,135	23,404	5,952
Canada (s.t.)	1,000	...	...
Belgium	1,590	...	...
Denmark	1,633	1,046	1,657
France	3,839	3,568	3,853
Germany, West**	5,432	6,267	...
Italy††	1,778	...	...
Netherlands	3,633	2,931	2,372
Norway	1,065	...	...
Sweden	1,365	282	...
Switzerland	1,468	1,191	1,189
U.K. (l.t.)	8,947	26,001	1,189
India† (l.t.)	1,406	3,308	...
EXPORTS			
U. S.* (s.t.)	28	193	1,418
Canada (s.t.)	15,610	3,478	4,024
Belgium	5,063	...	...
Denmark	382	682	613
France	1,109	684	26
Germany, West**	2,798	1,388	...
Netherlands	275	493	258
Sweden	1,798	1,586	...
Northern Rhodesia† (l.t.)	1,070	1,902	1,927
Australia (l.t.)	5,982	9,653	9,235

* Refined.
** Includes scrap.
†† Includes lead alloys.
† British Bureau of Non-Ferrous Metal Statistics.

French Lead Imports

(A.B.M.S.)

(In metric tons)

	1959		
	July	Aug.	Sept.
Ore (gross weight)	12,581	8,118	5,781
Morocco	11,356	7,107	5,781
Fr. Eq. Africa	1,225	1,000	....
Madagascar	....	11	....
Pig lead	3,568	3,853	4,020
Belgium	1,238	504	1,042
Germany (W.)	88	....	....
Spain	....	160	....
Algeria	26	14	6
Morocco	1,095	1,756	1,365
Tunisia	838	1,394	1,126
Australia	280	....	280
Other countries	3	25	....
Antimonial lead	285	47	31

U. K. Lead Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1959		
	July	Aug.	Sept.
(Gross Weight)			
Lead and lead alloys	26,001	9,364	11,829
Australia	22,059	4,115	10,022
Canada	2,842	3,485	1,278
Peru	100	100	...
Other countries	1,000	1,664	529

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U. S. Lead Consumption

(Bureau of Mines — In Short Tons)

		1959	
Metal Products	Jan.-Aug. totals	July	Aug.
Ammunition	29,650	3,486	3,437
Bearing metals	15,026	1,764	1,797
Brass and bronze	16,179	1,769	1,887
Cable covering	41,123	3,183	4,446
Calking lead	53,046	6,349	7,107
Casting metals	5,052	525	645
Collapsible tubes	5,700	453	677
Foil	2,591	284	414
Pipes, traps and bends	15,162	1,868	1,726
Sheet lead	18,879	2,185	2,260
Solder	46,102	6,888	6,193
Storage battery, grids, post, etc.	118,621	16,167	16,546
Storage battery oxides	116,317	14,107	15,671
Terne metal	1,300	143	119
Type metal	17,633	2,010	2,014
Total	**502,381**	**61,181**	**64,939**
Pigments:			
White lead	8,445	1,227	419
Red lead and litharge	54,267	6,376	7,490
Pigment colors	8,836	765	1,235
Other*	2,911	531	358
Total	**74,459**	**8,719**	**9,502**
Chemicals:			
Tetraethyl lead	106,305	15,281	11,379
Misc. chemicals	2,268	366	347
Total	**108,573**	**15,647**	**11,726**
Miscellaneous use:			
Annealing	3,059	121	160
Galvanizing	735	33	22
Lead plating	135	17	15
Weights and ballast	4,457	494	530
Total	**8,386**	**665**	**727**
Other uses unclassified	**10,741**	**1,354**	**1,157**
Total reported†	**704,540**	**87,566**	**88,051**
Estimated unreported consumption	16,000	2,000	2,000
Grand total†	**720,500**	**89,600**	**90,000**
Daily average‡	**2,965**	**2,890**	**2,904**

* Includes lead content of leaded zinc oxide production.
† Includes lead content of scrap used directly in fabricated products.
‡ Based on number of days in month without adjustment for Sundays and holidays.

U. K. Lead Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 pounds)

	1957	1958	1959
Jan.	29,657	29,607	28,872
Feb.	29,219	27,855	25,968
Mar.	29,144	29,713	26,691
Apr.	27,246	26,230	29,252
May	31,574	28,839	27,280
June	28,607	28,624	30,099
July	27,604	27,201	26,851
Aug.	24,756	21,726	25,358
Sept.	29,519	28,829	30,255
Oct.	32,486	31,356	....
Nov.	31,060	28,786	....
Dec.	26,530	27,154	....
Total	**347,699**	**335,920**	....

American Antimony

Monthly Average Prices
In bulk, f.o.b. Laredo
(Cents per lb. in ton lots)

	1956	1957	1958	1959
Jan.	33.00	33.00	33.00	29.00
Feb.	33.00	33.00	30.818	29.00
Mar.	33.00	33.00	29.00	29.00
Apr.	33.00	33.00	29.00	29.00
May	33.00	33.00	29.00	29.00
June	33.00	33.00	29.00	29.00
July	33.00	33.00	29.00	29.00
Aug.	33.00	33.00	29.00	29.00
Sept.	33.00	33.00	29.00	29.00
Oct.	33.00	33.00	29.00	29.00
Nov.	33.00	33.00	29.00	....
Dec.	33.00	33.00	29.00	....
Aver.	**33.00**	**33.00**	**29.485**	....

Consumers' Lead Stocks, Receipts and Consumption

(Bureau of Mines — In Short Tons)

	Stocks July 31, 1959	Net Receipts In August	Consumed In August	Stocks August 31, 1959
Soft lead	108,768	59,627	57,158	111,237
Antimonial lead	37,857	20,714	22,236	36,335
Lead in alloys	7,134	4,164	3,953	7,345
Lead in copper-base scrap	1,112	1,463	1,475	1,100
Total	154,871	85,968	*84,822	156,017

* Excludes 2,921 tons of lead which went directly from scrap to fabricated products and 308 tons of lead contained in leaded zinc oxide production.

Consumption of Lead by Class of Product

(Bureau of Mines — In Short Tons)

AUGUST

	Soft lead	Antimonial lead	Lead in alloys	Lead in copper-base scrap	Total
Metal products	35,010	21,669	3,931	1,475	62,085
Pigments	9,169	25	....	....	9,194
Chemicals	11,726	....	....	....	11,726
Miscellaneous	261	466	....	....	727
Unclassified	992	76	22	....	1,090
Total	57,158	22,236	3,953	1,475	*84,822

* Excludes 2,921 tons of lead which went directly from scrap to fabricated products and 308 tons of lead contained in leaded zinc oxide production.

Domestic Zinc Statistics

American Zinc Institute

Commencing with January, 1948, all regularly operating U. S. primary and secondary smelters are included in this report. Production from foreign ores also is included.
(Tons of 2,000 lbs.)

	Stock Beginning	Production	Shipments: Domestic	Shipments: Export & Drawback	Shipments: Gov't Acc't	Shipments: Total	Stock at End	Daily Avg. Prod.
1950 Tl.	94,221	910,354	849,246	18,189	128,256	995,691	8,884	2,494
1950 Mo. Avg.		75,863	70,770	1,516	10,688	82,974		
1951 Total	8,884	931,833	836,800	42,067	39,949	918,816	21,901	2,553
1951 Mo. Avg.		77,653	69,733	3,506	3,329	76,568		
1952 Total	21,901	961,430	803,343	56,202	36,626	896,171	87,160	2,627
1952 Mo. Avg.		80,119	66,945	4,683	3,052	74,681		
1953 Total	87,160	971,191	818,850	16,326	42,332	877,508	180,843	2,661
1953 Mo. Avg.		80,933	68,238	1,361	3,528	73,126		
1954 Total	180,843	868,242	787,922	27,929	108,957	924,808	124,277	2,379
1954 Mo. Avg.		72,353	65,660	2,327	9,080	77,067		
1955 Total	40,979	1,031,018	1,007,619	19,497	87,200	1,114,316	40,979	2,825
1955 Mo. Avg.		85,918	83,968	1,625	7,267	92,860		
1956 Total		1,062,954	869,270	9,027	157,014	1,035,311	68,622	2,904
1956 Mo. Avg.		88,850	72,439	752	13,085	86,275		
1957								
August	146,179	84,166	70,318	860	9,871	81,049	149,296	2,715
September	149,296	77,455	62,111	530	10,344	72,985	153,766	2,582
October	153,766	81,492	66,225	372	12,736	79,333	155,925	2,629
November	155,925	79,754	73,437	581	9,148	83,166	152,531	2,658
December	152,531	86,270	62,730	210	9,188	72,128	166,655	2,783
1957 Total		1,067,450	765,132	15,460	179,466	815,567		
1958								
January	166,655	82,343	58,211	641	9,805	68,657	180,346	2,656
February	180,346	68,354	49,072	446	9,993	59,511	189,189	2,441
March	189,189	72,274	48,948	111	8,763	57,822	203,641	2,331
April	203,641	70,214	46,598	159	5,927	52,684	221,171	2,340
May	221,171	71,018	51,390	129	....	51,519	240,670	2,291
June	240,670	66,967	54,487	171	....	54,658	252,979	2,232
July	252,979	65,119	60,312	55	....	60,187	257,911	2,101
August	257,911	62,927	68,718	591	....	69,309	251,529	2,030
September	251,529	63,705	76,905	213	....	77,118	238,116	2,124
October	238,116	65,304	93,018	226	....	93,224	210,176	2,107
November	210,176	65,174	83,394	212	....	83,606	191,744	2,172
December	191,744	75,503	76,862	148	....	77,010	190,237	2,432
1958 Total		828,902	767,755	3,102	34,488	805,325	....	....
1959								
January	190,237	76,481	70,770	171	....	70,941	195,777	2,467
February	195,777	71,174	65,641	849	....	66,490	200,461	2,542
March	200,461	79,918	73,814	482	....	74,296	206,083	2,578
April	206,083	76,393	78,358	255	....	78,613	203,863	2,546
May	203,863	77,489	85,073	275	....	85,348	196,004	2,500
June	196,004	75,544	99,858*	204	2,100	102,162	169,386	2,518
July	169,386	73,101	59,460	94	900	60,454	182,033	2,358
August	182,033	69,768	58,318	864	....	59,782	192,019	2,251
September	192,019	62,202	59,971	3,214	....	61,185	193,036	2,073
October	193,036	63,938	63,910	1,813	....	65,723	191,251	2,063

* Inflated by abnormal shipments on consignment of approximately 9,000 tons.

U. S. Consumption of Slab Zinc

Bureau of Mines
By Industries (Short Tons)

	Galvanizers	Die Casters	Brass products	Rolled zinc	Zinc oxide & other	Total
1950 Total	**434,094**	**281,385**	**136,451**	**67,779**	**27,656**	**947,365**
1951 Total	**386,373**	**266,442**	**141,456**	**64,000**	**28,738**	**887,009**
1952 Total	**375,563**	**236,022**	**155,311**	**51,508**	**30,885**	**849,289**
1953 Total	**403,162**	**305,846**	**177,301**	**53,784**	**38,037**	**977,636**
1954 Total	398,599	286,817	107,293	45,979	33,342	876,130
1955 Total	439,694	404,790	144,816	50,363	39,302	1,081,468
1956 Total	421,218	352,451	122,395	45,382	36,251	983,097
1957						
July	26,067	26,116	6,361	2,698	2,981	65,123
August	27,885	29,237	9,755	3,686	3,099	74,562
September	28,651	31,051	9,588	2,911	1,590	75,976
October	32,940	35,499	10,952	3,385	1,783	87,898
November	28,025	31,396	10,024	2,843	1,255	76,595
December	24,383	27,927	7,854	2,679	1,427	67,421
Total	355,796	358,543	111,114	39,544	20,486	924,063
1958						
January	26,861	26,348	9,115	3,183	1,664	69,295
February	24,598	22,629	7,279	2,716	1,316	60,347
March	27,171	19,045	6,871	3,138	1,724	59,978
April	27,464	17,829	6,392	3,259	1,295	58,432
May	30,935	18,316	6,597	2,896	2,263	61,907
June	34,377	21,497	6,643	2,961	2,212	67,690
July	30,677	17,387	6,275	2,848	1,920	60,007
August	34,663	20,382	8,358	3,379	1,901	70,033
September	34,048	25,188	9,624	3,458	770	74,122
October	36,513	27,682	11,753	3,845	881	81,919
November	31,658	27,311	10,067	3,276	826	74,302
December	31,746	29,926	10,529	3,681	1,018	78,082
Total	370,441	273,540	92,906	38,690	16,772	737,942
1959						
January	31,729	29,110	11,172	3,874	2,521	79,506
February	31,672	26,448	11,508	3,418	2,864	77,010
March	37,287	29,286	12,889	3,629	3,203	87,394
April	38,541	31,262	12,304	3,715	3,223	90,145
May	38,788	29,169	12,015	3,316	3,305	88,093
June	40,531	36,269	10,764	3,801	3,120	95,985
July	23,700	28,120	7,558	2,509	2,042	65,429
August	13,763	29,803	10,064	3,160	2,161	60,451

Prime Western Zinc Prices

(East St. Louis, f.o.b.)

(Cents per pound)
(In tons of 2,240 pounds)

	1956	1957	1958	1959
Jan.	13.46	13.50	10.00	11.50
Feb.	13.50	13.50	10.00	11.411
Mar.	13.50	13.50	10.00	11.00
Apr.	13.50	13.50	10.00	11.00
May	13.50	11.933	10.00	11.00
June	13.50	10.84	10.00	11.00
July	13.50	10.00	10.00	11.00
Aug	13.50	10.00	10.00	11.00
Sept.	13.50	10.00	10.00	11.381
Oct.	13.50	10.00	10.865	12.233
Nov.	13.50	10.00	11.386	....
Dec.	13.50	10.00	11.50	....
Aver.	**13.497**	**11.40**	**10.313**	....

High Grade Zinc Prices

(Delivered)
N. Y. Monthly Averages
(Cents per pound)

	1956	1957	1958	1959
Jan.	14.81	14.85	11.35	12.50
Feb.	14.85	14.85	11.35	12.411
Mar.	14.85	14.85	11.35	12.00
Apr.	14.85	14.85	11.084	12.00
May	14.85	13.283	11.00	12.00
June	14.85	12.19	11.00	12.00
July	14.85	11.35	11.00	12.00
Aug.	14.85	11.35	11.00	12.006
Sept.	14.85	11.35	11.00	12.625
Oct.	14.85	11.35	11.865	13.483
Nov.	14.85	11.35	12.386	....
Dec.	14.85	11.35	12.50	....
Aver.	**14.847**	**12.75**	**11.407**	....

U. K. Zinc Consumption

(British Bureau of Non-Ferrous Metal Statistics)
(In Tons of 2,240 Pounds)

	1957	1958	1959
Jan.	28,485	27,473	27,849
Feb.	26,276	24,551	25,676
Mar.	27,049	26,967	27,243
Apr.	24,247	24,984	28,006
May	29,589	24,579	26,167
June	25,202	25,587	30,221
July	25,934	23,794	26,318
Aug.	20,381	19,076	21,566
Sept.	27,792	26,747	31,270
Oct.	29,552	29,838	....
Nov.	26,705	26,432	....
Dec.	24,419	26,042	....
Total	**315,631**	**306,070**	....

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to
ADVERTISE
in the
DAILY METAL REPORTER

Mine Production of Zinc in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern States	Central States	Western States	Total U.S.*
1954				
Total	166,487	63,100	234,942	464,539
1955				
Total	163,230	73,630	277,811	514,671
1956				
Total	175,310	61,080	301,253	537,643
1957				
Total	196,877	29,506	290,151	520,128
1958				
Mar.	13,922	1,291	20,411	35,624
Apr.	15,719	1,311	22,375	39,405
May	15,580	1,314	18,940	35,834
June	14,931	1,490	16,650	32,971
July	13,427	——	15,985	29,442
Aug.	15,760	——	13,627	29,387
Sept.	14,857	——	15,279	29,865
Oct.	16,197	——	16,074	32,271
Nov.	15,393	——	16,998	32,391
Dec.	15,064	——	16,939	32,003
Total	181,202	8,450	213,267	402,919
1959				
Jan.	16,319	——	19,117	35,436
Feb.	16,405	——	19,304	35,709
Mar.	17,602	——	18,822	36,424
Apr.	18,521	——	19,149	37,570
May	18,500	——	19,170	37,670
June	17,501	——	18,443	35,944
July	12,697	——	18,686	31,383
Aug.	13,810	140	16,641	30,591
Sept.	13,639	154	15,081	28,874

*Includes Alaskan output in some months.

Mine Production of Lead in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern States	Central States	Western States	Total U.S.*
1953				
Ttl.	9,970	136,650	188,776	335,412
1954				
Ttl.	8,608	138,940	169,804	317,352
1955				
Ttl.	10,379	145,640	177,409	333,409
1956				
Ttl.	11,395	141,900	195,034	348,329
1957				
Ttl.	9,300	135,800	188,392	333,493
1958				
Apr.	487	12,438	12,739	25,664
May	626	11,660	11,939	24,225
June	615	10,662	11,499	22,776
July	454	10,019	10,662	21,135
Aug.	447	8,859	9,512	18,818
Sept.	389	7,734	11,221	19,344
Oct.	517	9,290	11,467	21,274
Nov.	606	10,500	11,823	22,929
Dec.	565	9,600	11,699	21,865
Ttl.	6,816	119,070	140,033	265,920
1959				
Jan.	469	9,748	13,180	23,397
Feb.	501	8,457	12,392	21,578
Mar.	601	7,943	12,585	21,129
Apr.	454	8,103	12,635	21,192
May	413	7,253	12,427	20,093
June	458	8,185	12,727	21,370
July	369	8,190	10,980	19,539
Aug.	353	9,762	11,533	21,648
Sept.	510	9,698	10,140	20,348

Mine Production of Gold in United States

(U. S. Bureau of Mines)

(In fine ounces)

	Eastern States	Western States	Alaska*	Total
1955				
Ttl.	2,026	1,634,625	247,535	1,884,186
1956				
Ttl.	1,998	1,607,930	204,300	1,814,228
1957				
Ttl.	2,174	1,556,450	210,000	1,768,624
1958				
Apr.	192	124,705	906	125,615
May	203	124,490	557	125,520
June	182	122,277	8,484	130,943
July	38	116,775	29,735	146,528
Aug.	174	113,281	34,947	148,202
Sept.	156	128,613	38,960	167,459
Oct.	186	135,882	42,467	178,535
Nov.	—	——	——	——
Dec.	—	——	10,373	144,757
1959				
Jan.	—	——	1,003	145,077
Feb.	—	——	233	128,614
Mar.	—	——	106	135,192
Apr.	—	——	106	136,283
June	—	——	8,882	146,815
July	—	——	26,457	160,859
Aug.	—	——	33,113	136,775
Sept.	—	——	36,626	113,202

* Alaska totals based on mint and smelter receipts.

Mine Production of Recoverable Silver in United States

(U. S. Bureau of Mines)

(In Fine Ounces)

	Eastern States	Missouri	Western States	Alaska*	Total
1957 Total	610,306	240,000	37,016,950	26,000	37,895,336
1958					
July	7,723	21,840	2,503,013	4,584	2,533,256
August	8,819	19,970	2,836,937	5,968	2,417,095
September	5,783	17,180	2,621,537	3,392	2,646,193
October	5,653	20,600	2,749,976	5,338	2,781,560
November	†	16,000	†	3,175	2,720,577
December	†	13,730	†	675	2,682,299
Total	†	210,000	†	28,000	33,022,225
1959					
January	†	21,000	†	132	2,751,918
February	†	18,060	†	154	2,892,032
March	†	17,200	†	10	2,965,289
April	†	17,600	†	15	2,957,890
May	†	15,900	†	68	3,033,726
July	†	8,900	†	2,767	2,885,519
August	†	10,600	†	3,940	2,272,487
June	†	17,900	†	927	2,901,123
July	†	8,900	†	2,767	2,885,519
August	†	10,600	†	3,940	2,245,778
September	†	10,400	†	4,093	1,673,326

† Figures not available. * Alaska totals based on mint and smelter receipts.

Production of Primary Aluminum in the U. S.

(U. S. Bureau of Mines)

(In short tons)

	1952	1953	1954	1955	1956	1957	1958	1959
Jan.	76,934	89,895	116,247	128,203	140,394	147,029	139,910	156,708
Feb.	72,374	92,649	110,483	116,236	132,763	119,059	121,980	142,116
Mar.	77,069	104,460	122,339	130,272	145,895	135,706	134,019	157,189
Apr.	76,880	102,071	120,434	126,394	144,726	139,152	128,559	155,213
May	80,803	105,464	125,138	131,128	150,800	145,174	129,083	163,857
June	77,476	104,152	120,758	127,634	145,726	138,007	115,325	167,323
July	78,368	109,285	126,161	132,669	151,624	142,157	118,811	179,594
Aug.	85,175	110,545	125,296	133,551	92,406	143,449	125,416	172,817
Sept.	76,882	109,333	120,332	130,606	132,316	129,278	124,713	168,205
Oct.	77,312	108,219	125,089	134,655	149,125	133,759	139,847	173,762
Nov.	74,639	105,636	121,252	133,689	145,081	135,024	140,962	....
Dec.	83,419	110,291	127,056	140,748	148,391	140,033	153,301	....
Ttl.	937,330	1,252,013	1,460,565	1,565,721	1,679,427	1,647,710	1,565,556	....

U. S. Silver Production*

(A.B.M.S.)

(In thousands of ounces; commercial bars, 0.999 fine, and other refined forms)

	Dom.†	For.	Total
1954 Total	38,059	39,422	77,481
1955 Total	33,101	32,780	65,881
1956 Total	38,157	40,160	78,317
1957 Total	36,279	34,932	71,211
1958			
March	2,465	3,568	6,033
April	3,123	3,056	6,179
May	2,597	2,660	5,257
June	3,243	3,210	6,453
July	2,137	2,484	4,621
August	2,651	3,235	5,886
September	2,614	3,165	5,779
October	3,831	2,750	6,581
November	2,505	3,283	5,788
December	3,275	3,652	7,236
Total	35,691	37,572	73,263
1959			
January	2,330	4,460	6,790
February	2,827	2,913	5,740
March	2,823	4,087	6,910
April	2,946	3,233	6,179
May	2,641	3,484	6,125
June	3,219	3,231	6,450
July	2,609	3,284	5,893
August	1,472	1,229	2,701
September	390	577	967

* The separation between silver of foreign and domestic origin on the basis of refined bars and other refined forms is only approximate.

† Includes purchases of crude silver by the U. S. Mint.

Average Silver Prices

(Cents per fine ounce)

	1956	1957	1958	1959
Jan.	90.357	91.375	89.449	90.19
Feb.	90.90	91.375	88.625	90.444
Mar.	91.128	91.375	88.625	91.351
Apr.	90.875	91.375	88.625	91.375
May	90.75	91.307	88.625	91.375
June	90.46	90.456	88.625	91.375
July	90.14	90.31	88.625	91.375
Aug.	90.614	90.909	88.625	91.399
Sept.	90.75	90.602	88.673	91.399
Oct.	90.722	90.625	89.966	91.375
Nov.	91.375	90.382	90.125	....
Dec.	91.375	89.80	89.932	....
Aver.	90.79	90.824	89.043	....

Note — The averages are based on the price of refined bullion imported on or after August 31, 1943.

U. S. Lead Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	July	Aug.	Sept.
Ore, matte, etc. (content)	11,891	5,952	16,436
Canada	3,249	2,400	3,801
Mexico	122	50	40
Guatemala	146	...	...
Honduras	361	222	554
Bo'ivia	604	993	1,118
Colombia	...	212	...
Peru	2,070	1,334	672
U. of S. Africa	3,090	...	6,844
Australia	2,177	548	3,387
Philippines	36	29	11
Other countries	36	164	9
Base bullion (content)	2	48	25
Canada	...	...	25
Peru	..	45	...
Other countries	2	3	...
Pigs and bars	23,404	19,074	16,623
Canada	3,104	2,882	3,208
Mexico	6,715	7,000	5,861
Peru	2,051	2,849	1,884
Belgium	...	...	1,223
France	83	...	...
Germany (W.)	...	...	165
Spain	...	...	1,120
United Kingdom	313	112	...
Yugoslavia	4,179	3,637	...
Australia	6,959	2,567	3,001
Other countries	...	27	161
Total Imports:			
Ore, base bullion, refined	35,297	25,074	33,084
Lead scrap, dross, etc. ((cont.)	420	296	1,323
Antimonial lead & typemetal	2	100	200
Lead content thereof	2	77	164

U. S. Copper Exports

(A.B.M.S.) (Bureau of the Census)

	1959		
	July	Aug.	Sept.
Ore, conc. matte & other unref. (cont.)	20	...	6
Refined ingots, bars, etc.†	11,378	16,605	8,965
Canada	15	3	68
Argentina	...	772	...
Brazil	235	355	180
Austria	...	20	...
Denmark	112	336	...
France	2,780	4,175	416
Germany (W.)	4,770	3,555	5,430
Italy	1,067	2,851	677
Netherlands	112	1,229	336
Norway	...	...	224
Sweden	112	145	112
Switzerland	27	45	112
United Kingdom	1,713	1,855	705
Yugoslavia	...	...	569
Taiwan	...	10	10
India	...	592	67
Japan	338	322	55
Australia	...	336	...
Other countries	97	4	4
Total Exports:			
Crude & refined	11,398	16,605	8,971
Pipes and tubes	84	37	63
Plates and sheets	12	17	20
Semifabricated forms	276	444	562
Wire, bare	502	211	181
Building wire and cable‡	164	145	227
Weatherproof wire‡	5	5	5
Insulated copper wire n.e.s.‡	1,139	4,252	973

† Includes exports of refined copper resulting from scrap that was reprocessed on toll for account of the shipper.

‡ Gross weight; n.e.s.—not elsewhere specified.

U. S. Zinc Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	July	Aug.	Sept.
Zinc Ore (content)	47,432	34,644	32,409
Canada	17,256	11,497	14,674
Mexico	21,044	18,149	10,682
Cuba	...	50	...
Guatemala	...	8	...
Honduras	...	182	53
Bolivia	674	...	113
Colombia	...	10	...
Peru	7,193	4,520	6,303
U. of S. Africa	377	..	27
Australia	687	222	475
Philippines	1	1	...
Other countries	200	5	82
Zinc blocks, pigs, etc.	17,139	9,116	13,273
Canada	9,756	5,980	6,444
Mexico	1,179	...	1,374
Peru	1,894	533	1,024
Belgium	190	45	1,653
Italy	441	110	20
United Kingdom	...	...	85
Yugoslavia	253	248	717
Belgian Congo	185	1,640	1,116
Rhodesia & Nyasaland	...	560	...
Australia	3,241	...	840
Total Imports:			
Zinc ore, blocks, pigs	64,571	43,760	45,682
Dross and skim.	134	166	44
Old and worn out	12	36	29

U. S. Zinc Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	July	Aug.	Sept.
Slabs, blocks, etc.	146	214	3,024
Canada	...	...	1
Mexico	...	110	242
Brazil	...	...	68
Chile	...	...	110
Belgium	...	...	1,791
Germany (W.)	...	...	56
Netherlands	...	...	112
United Kingdom	140	84	644
Taiwan	...	10	...
Other countries	6	10	...
Total Exports:			
Ore, conc., slabs, blocks	146	214	3,024
Scrap, ashes, dross and skimmings	850	2,135	2,413
Battery shells and parts, unassembled	60	...	25
Rolled in sheets, plates and strips and die castings	205	337	262
Zinc & zinc alloys in crude and semifabricated forms	69	95	26
Zinc oxide	206	258	177

Comparative Metal Prices

	Av. 1939	OPA Av. 1946	1959 Nov. 20
Copper, domestic Electro., Del. Val.	11.20	14.375	33.00*
Lead (N. Y.)	5.05	8.25	13.00
P. W. Zinc (E. St. Louis, f.o.b.)	5.05	5.05	12.50
New York, del.	...	...	13.00
Tin Spot Straits, N. Y.	...	...	101.875
Aluminum ingot 99½%+	20.00	15.00	26.80
Antimony (R.M.M. brand f.o.b. Laredo)	12.36	14.50	29.00

* Producers' prices.

U. S. Copper Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	July	Aug.	Sept.
Ore, matte & regulus (cont.)	5,331	6,301	10,660
Canada	1,908	385	76
Mexico	188	185	43
Cuba	...	1,210	1,077
Argentina	15	...	...
Bolivia	268	38	...
Chile	1,575	...	2,453
Peru	579	301	1,495
Philippines	...	1,582	4,280
U. of S. Africa	798	...	1,192
Australia	...	2,598	44
Other countries	...	2	...
Blister copper (content)	27,860	18,837	25,019
Mexico	3,283	2,529	...
Chile	16,632	15,214	22,657
Peru	610	...	594
Rhodesia & Nyasaland	6,773	...	...
U. of S. Africa	556	...	1,667
Turkey	...	1,094	...
Other countries	6	...	101
Refined cathodes and shapes	10,742	12,935	40,284
Canada	4,112	7,131	13,253
Mexico	330	499	627
Chile	939	1,823	3,699
Peru	1,998	1,700	3,496
Belgium	1,250	...	2,614
Germany (W.)	...	...	5,751
Sweden	...	...	560
United Kingdom	...	2	6,181
Belgian Congo	1,200	1,500	...
Rhodesia & Nyasaland	913	280	4,019
Other countries	...	...	84
Total Imports:			
Crude & refined	43,933	38,073	75,963
Old and scrap (content)	523	242	474
Composition metal (content)	2	...	27
Brass scrap and old (cu. cont.)	95	134	265

U. S. Copper Scrap Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	July	Aug.	Sept.
Copper scrap, unalloyed* (new and old)	219	183	773
Canada	118	...	41
Argentina	...	22	...
Germany (W.)	20	172	472
Netherlands	...	28	...
India	...	56	180
Japan	53	...	80
Other countries	28	5	...
Copper-base scrap, alloyed† (new and old)	2,092	1,823	1,941
Canada	31	3	...
Mexico	...	...	5
France	...	20	20
Germany (W.)	170	346	260
Italy	...	26	121
Netherlands	16	17	11
Switzerland	...	...	84
India	102	80	102
Japan	1,709	1,185	1,019
Hong Kong	61	145	309
Other countries	3	1	10

* Ash, brass mill, clippings, dross, flue dust, residues, scale, skimmings, wire scrap.

† Copper-base alloys, including brass and bronze —Ashes, clippings for remanufacture, cupro-nickel scrap, cupro-nickel trimmings, nickel silver scrap, phosphor bronze, phosphor copper, skimmings, turnings, round.

World Production of Copper

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States (a)	Canada (b)	Mexico (crude) (c)	Chile (d)	Peru (d)	Fed. Rep. of Germany (e)	Norway (f)	United Kingdom (g-h)	Yugoslavia (e)	India (f-h)	Japan (e)	Turkey (f)	Australia (e)	Northern Rhodesia (e)	Union of South Africa (d)
1955															
Total	1,036,702	326,599	61,583	447,288	35,478	286,805	14,876	138,271	31,151	8,432	124,908	26,313	41,935	350,302	47,176
1956															
Total	1,133,134	356,251	69,918	506,251	35,005	279,461	16,457	127,365	32,390	8,827	139,062	27,101	55,711	435,186	47,914
1957															
Total	1,115,483	360,745	42,905	....	46,141	255,710	17,265	121,799	37,186	9,298	143,654	27,101	55,633	499,418	47,828
1958															
April	86,123	32,635	6,101	16,115	4,010	23,286	1,463	9,884	3,149	788	8,515	2,942	6,220	41,396	4,413
May	80,628	32,471	6,141	23,264	3,481	24,543	1,636	7,095	2,957	786	9,806	2,574	6,229	41,615	4,488
June	71,092	32,418	5,954	34,811	3,405	23,128	1,674	7,414	3,102	769	10,617	1,810	6,819	44,447	4,018
July	64,444	31,131	5,995	40,495	3,780	24,418	1,610	9,091	3,245	801	10,762	1,136	6,139	44,010	3,324
Aug.	67,917	50,867	6,340	45,211	3,646	26,409	1,855	3,451	2,838	786	11,053	....	6,220	42,000	4,974
Sept.	79,541	27,546	6,294	40,913	3,637	24,649	1,749	12,027	2,870	792	12,583	....	....	17,291	4,726
Oct.	92,214	22,572	5,380	47,230	2,950	27,635	1,618	11,225	3,616	809	13,310	....	....	....	4,749
Nov.	96,369	20,368	5,040	46,310	3,923	24,932	1,594	8,542	3,462	774	11,764	....	....	25,612	4,249
Dec.	97,641	19,023	5,066	46,284	3,196	25,569	1,597	9,042	2,929	832	15,054	....	....	45,935	4,406
Total	1,881,170	346,816	68,386	462,064	42,750	295,312	19,529	106,134	37,116	9,062	136,612	24,676	72,361	426,513	53,090
1959															
Jan.	95,542	24,669	5,342	44,579	3,115	25,945	1,724	7,356	3,685	679	17,385	2,469	5,349	48,699	4,600
Feb.	88,432	28,016	4,810	43,589	1,627	24,289	1,599	9,211	3,521	557	11,388	1,614	5,930	44,420	4,339
Mar.	101,410	32,427	4,771	44,554	1,601	26,959	1,694	8,654	3,536	810	10,746	2,034	4,573	51,630	4,611
April	98,376	32,130	5,201	42,715	4,250	26,859	1,870	11,259	3,593	763	17,938	2,330	7,419	48,150	4,528
May	104,236	32,622	5,275	46,083	3,770	25,358	1,771	7,693	3,503	764	18,516	2,480	6,408	53,067	4,676
June	99,419	36,979	5,847	46,901	3,357	24,635	1,743	10,909	3,231	776	18,621	2,362	....	53,895	4,766
July	81,662	36,296	5,755	45,421	3,676	25,890	....	7,108	3,369	781	18,957	1,846	....	46,806	....
Aug.	51,327	....	5,326	49,786	2,533	24,716	....	6,610	....	774	18,805	....	....	50,285	....
Sept.	19,166	....	4,125	....	3,782	....	....	....	....	....	18,837	....	....	48,753	....

(a) Reported by Copper Institute. Crude, "recoverable contents of mine production or smelter production or shipments, and custom intake." Does not include intake of scrap nor of imported ore except that received from Cuba and Philippines. (b) Blister copper plus recoverable copper in concentrates, matte, etc., exported. (c) Crude copper, i. e., copper content of blister or converter copper as originally produced in the several countries, although some of it may be refined at home; e. g., in Rhodesia. (d) Blister and/or refined. (e) Refined. There are quantities of scrap included in the electrolytic production in addition to that reported, tonnage of which is not obtainable. (f) Smelter production. (g) Refinery production from imported blister only. (h) British Bureau of Non-Ferrous Metal Statistics. * Refined.

World Production of Refined Lead

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States	Canada	Mexico	Peru	Belgium	France	Fed. Rep. of Germany	Italy	Spain	Yugoslavia	Japan	Australia (a)	French Morocco	Tunisia	Rhodesia	Total
1955																
Total	547,153	148,811	221,138	67,303	91,241	73,251	162,508	46,806	67,509	83,347	40,912	254,558	28,870	28,620	17,976	1,893,125
1956																
Total	613,293	147,865	213,524	61,917	111,479	73,251	178,713	42,780	64,824	83,507	51,019	256,300	30,993	26,623	17,024	1,984,344
1957																
Total	604,533	142,935	218,266	55,971	....	94,509	195,136	42,336	61,332	85,313	59,670	261,035	34,442	27,069	12,364	2,041,530
1958																
April	40,984	11,785	21,099	5,626	8,917	8,858	15,144	4,652	6,281	7,021	3,481	19,876	2,338	2,394	1,204	160,948
May	47,487	12,212	21,005	5,421	9,058	8,339	16,327	2,402	6,944	7,482	3,541	25,035	3,532	2,978	1,204	174,255
June	44,636	12,706	17,846	6,255	8,264	7,977	15,194	3,677	6,403	6,469	3,461	22,979	2,906	3,127	1,232	164,278
July	38,827	7,175	18,315	6,880	8,548	8,319	11,229	4,581	6,327	6,872	3,567	21,563	2,767	568	1,232	147,624
Aug.	39,250	6,940	17,991	6,100	7,495	15	13,760	4,584	6,913	5,414	3,610	19,942	2,584	2,756	1,176	140,501
Sept.	43,269	10,908	16,256	5,192	7,849	8,202	15,700	4,367	5,692	6,942	3,587	22,632	2,184	2,369	1,120	158,285
Oct.	45,467	12,598	11,968	5,074	7,940	9,308	17,130	4,639	7,121	9,242	3,522	22,482	3,560	2,410	1,176	164,818
Nov.	40,486	10,645	17,067	6,448	9,495	9,068	17,785	4,825	6,914	11,155	3,555	20,148	2,625	2,519	1,120	165,406
Dec.	44,042	11,076	20,902	5,344	10,342	10,351	18,370	5,101	7,069	11,212	3,769	21,492	4,002	2,779	1,120	179,309
Total	575,612	130,886	246,443	80,999	119,192	111,337	223,973	60,860	77,490	92,903	52,915	271,654	42,266	32,359	16,492	1,955,753
1959																
Jan.	43,662	14,073	19,031	4,951	10,761	6,694	18,658	4,636	6,215	4,082	6,086	24,470	2,575	1,068	1,344	169,256
Feb.	39,498	12,740	15,472	2,662	9,460	5,812	17,869	4,437	6,020	8,596	6,474	22,037	2,319	1,765	1,344	157,928
Mar.	39,238	13,704	16,305	3,424	8,447	6,733	17,553	3,168	6,196	8,153	6,889	20,144	1,905	2,429	1,344	156,914
April	40 606	13,655	16,621	4,438	8,038	5,541	17,141	4,942	6,491	6,876	6,615	23,919	2,726	2,155	1,344	162,611
May	39,101	13,357	16,934	6,606	8,797	7,363	17,728	3,614	7,435	8,369	6,137	23,499	2,050	1,784	1,344	165,602
June	37,459	12,997	20,000	6,540	9,125	6,976	18,128	2,453	6,510	7,854	6,349	25,151	1,552	926	1,344	164,815
July	32,882	....	17,099	6,401	8,734	6,065	16,381	4,384	6,074	2,221	5,303	19,125	2,859	1,749	1,344	.....
Aug.	25,589	....	19,086	4,267	7,547	6,581	15,256	3,354	....	....	5,344	....	862	2,863	1,344	.....
Sept.	14,801	....	14,320	4,354	....	....	....	....	....	....	5,326	....	....	....	1,344	.....

(a) Production credited to Australia includes lead refined in England from Australian base bullion.

World Production of Slab Zinc

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States (a)	Can. (b)	Mexico	Peru (b-c)	Belgium	France (a)	Fed. Rep. of Germany	Great Britain	Italy	Netherlands	Norway (b)	Spain	Yugoslavia	Japan (a)	Australia (b)	Rhodesia (b)	Total (d)
1955																	
Total	1,031,018	257,008	61,879	18,943	233,623	123,623	197,024	90,917	77,761	31,202	49,724	26,244	15,175	122,965	113,221	31,248	2,534,457
1956																	
Total	1,062,954	255,601	62,136	10,428	251,906	124,105	204,961	90,784	80,407	32,123	53,170	25,224	15,434	153,821	117,445	32,396	2,630,383
1957																	
Total	1,574,500	247,356	62,354	35,772	259,701	148,455	202,627	85,348	81,179	32,786	52,787	24,279	30,256	152,145	123,587	33,040	2,691,699
1958																	
Mar.	72,274	22,314	5,620	2,782	21,453	13,786	16,743	7,584	6,549	2,709	3,851	2,045	3,013	13,217	10,707	2,856	214,049
April	70,214	20,989	5,289	2,597	20,886	14,985	15,693	8,018	6,925	2,586	3,850	2,207	2,853	9,305	10,424	2,772	204,625
May	71,018	21,269	5,254	2,699	20,949	15,279	16,128	6,343	7,202	2,442	3,962	2,372	2,871	13,504	10,918	2,856	211,529
June	66,967	20,354	5,016	2,429	20,094	14,243	15,663	7,202	7,731	2,221	3,307	2,309	2,854	14,040	10,988	2,744	204,067
July	65,119	20,878	5,285	2,520	19,556	14,295	16,210	7,140	5,879	2,471	3,815	2,296	2,928	15,835	10,742	2,884	203,828
Aug.	62,297	21,152	5,216	2,822	18,308	14,253	16,204	6,689	5,991	2,533	3,793	2,259	2,820	12,420	11,075	2,912	.....
Sept.	63,705	20,531	5,025	2,640	17,961	12,232	15,635	6,887	5,991	2,533	3,793	2,259	2,820	12,420	11,075	2,912	199,142
Oct.	65,304	21,125	5,344	2,305	17,866	14,176	16,462	6,046	6,442	2,820	4,915	2,313	2,793	14,436	11,045	2,940	203,169
Nov.	65,174	20,274	5,197	2,625	18,696	13,274	16,196	6,158	5,874	2,249	4,669	2,244	3,370	13,501	10,508	2,828	197,481
Dec.	75,503	21,705	5,537	2,686	19,402	13,844	17,090	7,564	6,344	2,332	4,755	2,262	2,684	12,473	10,860	2,856	213,093
Total	802,607	254,661	18,354	34,685	257,540	177,422	210,408	80,494	5,955	2,841	54,423	26,750	34,446	166,883	128,548	39,508	2,464,639
1959																	
Jan.	76,481	21,456	5,476	2,753	19,857	13,903	17,164	5,955	5,617	2,693	4,826	2,028	2,647	11,679	10,541	2,800	211,506
Feb.	71,174	19,709	4,915	1,497	19,838	13,491	15,632	6,123	4,735	2,927	4,928	1,926	2,510	14,105	9,617	2,548	199,495
Mar.	79,918	22,135	5,439	2,363	20,215	14,230	17,325	7,797	6,801	2,921	4,917	2,369	3,014	13,217	10,759	2,800	221,316
Apr.	76,393	21,512	5,225	2,502	20,408	14,087	16,426	6,030	7,039	2,816	3,621	2,239	2,509	15,645	10,472	2,716	216,378
May	77,489	21 147	5,108	2,545	21,181	13,902	16,633	6,595	7,790	2,823	4,798	2,273	2,701	16,171	11,137	2,744	226,057
June	75,544	21 250	4,776	2,524	21,004	14,120	16,185	8,271	7,164	2,899	4,759	2,180	2,083	15,873	10,899	2,716	.....
July	73,101	21,055	5,038	2,634	20,100	14,262	16,325	6,112	7,303	2,917	4,539	2,057	3,796	16,754	11,189	2,856	.....
Aug.	69,768	21,588	4,965	2,504	19,472	14,138	10,938	6,507	7,370	2,968	4,646	....	....	15,305	11,293	2,912	.....
Sept.	62,202	20,744	4,935	2,537	....	....	....	7,892	....	2,928	4,708	....	....	15,133	....	2,800	.....

(a) Partially electrolytic. (b) Entirely electrolytic. (c) Beginning 1954 both electrolytic and electrochemic. (d) The above totals omit production in Russia, Czechoslovakia, Poland and in Argentina.

U. K. Stocks of Zinc

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

At start of:	Virgin Zinc 1958	Virgin Zinc 1959	Zinc Conc. 1958	Zinc Conc. 1959
Jan.	44,926	34,166	79,349	56,371
Feb.	43,308	34,805	82,125	58,518
Mar.	46,662	36,850	87,721	57.897
Apr.	46,608	38,457	84,631	52,151
May	47,251	38,643	80,964	47,936
June	50,539	37,713	74,470	41,954
July	49,613	38,297	71,553	45,640
Aug.	48,497	37,427	70,105	43,948
Sept.	45,590	40,358	63,909	42,385
Oct.	45,784	40,995	57,376	39,233
Nov.	39,341	....	53,371	....
Dec.	35,396	....	58,022	....

U. K. Zinc Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1959 July	1959 Aug.	1959 Sept.
(Gross Weight)			
Zinc ore and concentrates	13,846	12,762	4,230
Zinc conc.*	4,858	5,311	†
Australia	2,175	3,961	...
Canada	2,118	...	...
Peru	565	556	...
Burma	...	698	...
Other countries	...	96	...
Zinc and zinc alloys: (Gross Wt.)	12,765	12,594	17,095
Rhodesia-Nyasaland	175	200	225
Australia	1,789	...	1,452
Canada	6,451	5,788	5,842
Belgium	689	982	1,455
Germany (W.)	10	375	...
Netherlands	75	1,075	550
Soviet Union	956	551	300
United States	566	225	86
Belgian Congo	1,000	1,105	2,000
Other countries	1,054	2,293	5,185

* British Bureau of Non-Ferrous Metal Statistics. The estimated zinc content is not the content of the gross weight as officially reported for any comparable period.

† Not available.

U. K. Copper Exports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1959 July	1959 Aug.	1959 Sept.
(Gross Weight)			
Copper unwrought —ingots, blocks, slabs, bars, etc.	5,116	7,284	10,359
Plates, sheets, rods, etc.	1,578	1,739	1,507
Wire (including uninsulated electric wire)	272	463	248
Tubes	1,064	828	787
Other copper, worked (includ- pipe fit- ings)	147	87	134
Total	8,177	10,401	13,035

Copper Consumption in United Kingdom

British Bureau of Non-Ferrous Metal Statistics

(In tons of 2,240 pounds)

	Unalloyed	Alloyed*	Total	Virgin	Scrap
1956 Total	388,167	251,312	639,479	500,794	138,685
1957 Total	407,326	234,158	641,484	507,493	133,991
1958					
May	35,810	18,423	54,233	43,571	10,662
June	39,277	18,141	57,418	46,080	11,338
July	36,743	17,091	53,564	42,373	11,191
August	28,416	13,756	42,181	33,073	9,108
September	42,813	18,596	61,408	52,018	9,390
October	43,402	21,788	65,190	53,937	11,253
November	40,987	19,232	60,219	47,932	12,287
December	37,580	19,118	56,698	45,968	10,730
Total	442,977	225,001	667,978	534,619	133,359
1959					
January	32,678	21,217	52,979	39,815	13,164
February	29,373	19,020	48,293	35,775	12,518
March	27,864	19,567	47,431	36,124	11,307
April	32,742	22,782	55,525	43,015	12,509
May	28,421	19,199	47,620	33,367	14,253
June	35,009	21,103	56,112	44,761	11,351
July	24,714	19,858	44,572	32,034	12,538
August	24,524	16,097	40,621	30,866	9,735
September	35,447	21,920	57,367	45,178	12,189

* Includes copper sulphate effective October, 1954.

U. K. Virgin Copper Stocks

(In long tons)

(British Bureau of Non-Ferrous Metal Statistics)

At start of:	1957	1958	1959
Jan.	59,614	91,477	64,184
Feb.	59,203	82,483	65,941
Mar.	62,120	89,147	65,875
Apr.	61,779	94,330	72,946
May	71,101	88,582	72,318
June	61,991	88,913	78,505
July	64,121	81,851	80,477
Aug.	81,146	84,756	81,986
Sept.	98,595	89,899	89,483
Oct.	100.815	85,092	77,803
Nov.	90,877	74,686	....
Dec.	81,657	69,023	....

U. K. Refined Lead Stocks

(British Bureau of Non-Ferrous Metal Statistics)

(In long tons)

At start of:	1957	1958	1959
Jan.	39,420	51,295	45,444
Feb.	41,433	49,134	48,102
Mar.	36,900	47,738	40,535
Apr.	34,877	40,547	53,289
May	44,933	37,509	62,286
June	40,804	34,608	63,135
July	42,148	40,518	57,810
Aug.	48,275	37,148	67,586
Sept.	51,435	43,758	66,048
Oct.	45,301	48,856	63,121
Nov.	50,371	40,216	....
Dec.	48,065	35,335	....

Zinc Imports and Exports By Principal Countries

(A.B.M.S.)

Reported in pigs, bars, etc.; except where otherwise noted.

(In metric tons)

	1959 June	1959 July	1959 Aug.
IMPORTS			
U. S. (s.t.)	17,744	17,139	9,116
Canada (s.t.)	251	...	...
Belgium	60	...	...
Denmark	1,254	430	874
France	1,573	1,537	1,352
Germany, (W.)*	7,462	7,436	...
Italy	380	...	...
Netherlands	817	824	549
Sweden	2,236	2,231	...
Switzerland*	1,657	977	903
U. K. (l.t.)	15,554	12,765	12,594
India† (l.t.)	4,528	7,477	3,358
EXPORTS			
U. S. (s.t.)	151	146	214
Canada (s.t.)	16,878	16,237	11,546
Belgium	12,052	...	...
Denmark	58	142	15
France	271	83	477
Germany, (W)*	1,716	1,335	...
Italy	1,604	...	...
Netherlands	1,776	1,046	2,175
Norway	2,992	...	...
Switzerland*	392	395	548
U. K.** (l.t.)	412	427	443
Northern Rhodesia† (l.t.)	2,937	2,658	3,620
Australia (l.t.)	2,997	3,938	2,763

* Includes scrap.
** Includes manufactures.
† British Bureau of Non-Ferrous Metal Statistics.

United Kingdom Tin Statistics

(British Bureau of Non-Ferrous Metal Statistics)

	Tin Content of Tin in Ore: Imports	Production*	Stock at end of period*	Tin Metal: Imports	Production*	Consumption	Exports & Re-exports	Stock at end of period
1957 Total	39,272	1,028	....	9,834	34,175	20,365	7,362	71,931
1958								
September	1,743	99	1,564	1,141	2,579	1,784	988	19,942
October	1,913	91	1,419	145	2,488	2,072	882	20,135
November	1,971	96	1,770	851	2,187	1,795	594	19,285
December	2,757	90	2,299	317	2,350	1,802	1,770	19,054
1958 Total	27,419	1,090	....	13,195	32,551	20,413	20,398	19,054
1959								
January	1,337	113	1,095	324	2,925	1,769	2,381	16,744
February	1,817	115	1,300	230	1,677	1,614	4,153	14,715
March	1,545	100	1,595	....	1,572	1,773	2,658	13,264
April	1,743	103	1,798	....	1,636	1,745	3,326	10,685
May	1,493	92	1,575	28	1,808	1,686	2,421	9,445
June	1,323	129	920	25	2,267	1,987	2,919	9,638
July	2,971	112	2,043	47	2,736	1,682	2,639	11,255
August	1,878	....	....	21	1,908	1,224	2,956	10,752

*As reported by International Tin Study Group. Production of Tin Metal includes production from imported scrap and residues refined on toll. Stocks exclude strategic stock but include official warehouse stocks.

Canada's Copper Output

(Dominion Bureau of Statistics)

(Refined Copper)

(In Tons)

	1956	1957	1958	1959
Jan.	26,653	25,469	32,868	24,664
Feb.	26,229	21,861	28,668	28,016
Mar.	26,750	27,663	29,239	32,427
Apr.	26,617	27,398	30,635	32,130
May	27,626	29,086	32,471	32,622
June	27,122	24,093	32,418	36,979
July	27,250	27,195	31,131	36,067
Aug.	29,219	26,943	30,867	35,045
Sept.	27,950	24,633	27,546	....
Oct.	29,696	30,312	22,572	....
Nov.	27,346	27,331	20,368	....
Dec.	28,716	31,604	19,033	....
Year	331,174	323,588	346,816	....

Canada's Copper Exports

(Dominion Bureau of Statistics)

(Ingots, bars, slabs and billets)

(In Tons)

	1956	1957	1958	1959
Jan.	15,981	20,582	26,883	10,620
Feb.	11,041	16,272	16,816	10,304
Mar.	12,276	14,270	18,662	11,025
Apr.	14,476	16,417	23,261	17,079
May	12,851	19,048	19,358	21,739
June	10,985	10,826	20,831	21,310
July	13,599	18,621	21,703	13,650
Aug.	14,710	21,980	15,881	15,155
Sept.	17,268	14,314	15,373	....
Oct.	13,896	13,110	20,341	....
Nov.	19,130	16,622	14,391	....
Dec.	18,630	16,282	11,138	....
Year	174,843	198,794	224,638	....

Canada's Lead Output

(Dominion Bureau of Statistics)

(Recoverable Lead)*

(In Tons)

	1956	1957	1958	1959
Jan.	16,002	14,032	17,117	17,118
Feb.	14,344	15,170	14,908	15,923
Mar.	16,857	16,940	15,421	17,389
Apr.	11,573	14,275	15,644	16,237
May	15,446	14,591	15,131	16,813
June	18,145	16,431	15,645	14,968
July	15,841	14,377	14,076	15,111
Aug.	16,104	14,679	12,260	14,104
Sept.	15,760	15,869	15,401	....
Oct.	16,725	14,151	14,564	....
Nov.	14,865	15,879	16,680	....
Dec.	16,056	15,296	18,248	....
Year	188,971	171,690	185,095	....

* New base bullion from Canadian ores plus recoverable lead in ores or concentrates shipped for export.

Canada's Lead Exports

(Dominion Bureau of Statistics)

(In Pigs)

(In Tons)

	1956	1957	1958	1959
Jan.	4,888	8,946	4,752	5,034
Feb.	3,856	6,633	1,553	6,377
Mar.	4,007	7,044	9,497	11,831
Apr.	7,636	7,314	7,450	7,836
May	7,214	9,676	7,764	12,230
June	6,632	7,210	4,036	15,610
July	9,696	4,682	12,629	3,478
Aug.	4,713	6,416	7,232	4,023
Sept.	9,908	8,467	5,125	....
Oct.	9,072	7,761	10,320	....
Nov.	9,227	6,175	10,641	....
Dec.	2,734	4,217	11,352	....
Year	79,633	84,541	92,351	....

Canada's Zinc Output

(Dominion Bureau of Statistics)

(Refined Zinc)

(In Tons)

	1956	1957	1958	1959
Jan.	21,696	20,340	21,801	21,456
Feb.	20,356	19,808	19,743	19,709
Mar.	22,010	21,941	22,314	22,135
Apr.	21,339	20,504	20,989	21,512
May	21,790	20,564	21,269	21,147
June	20,780	19,928	20,353	21,250
July	21,691	20,061	20,873	21,055
Aug.	21,354	20,305	21,152	21,588
Sept.	20,691	20,247	20,530	....
Oct.	21,412	20,892	21,125	....
Nov.	20,470	20,933	20,273	....
Dec.	22,012	21,823	21,705	....
Year	255,607	247,351	252,157	....

Canada's Zinc Exports

(Dominion Bureau of Statistics)

(Slabs in Tons)

	1956	1957	1958	1959
Jan.	15,550	19,304	17,349	13,565
Feb.	11,757	16,618	8,376	12,675
Mar.	8,822	14,923	19,636	14,617
Apr.	14,317	17,131	16,346	12,789
May	11,357	16,680	15,121	11,049
June	15,296	16,157	7,776	20,298
July	15,499	12,912	27,394	23,122
Aug.	13,070	20,520	15,906	18,464
Sept.	19,732	17,671	8,670	....
Oct.	20,792	16,735	22,810	....
Nov.	21,411	17,225	17,978	....
Dec.	16,125	16,131	18,344	....
Year	183,728	202,007	195,707	....

Canada's Silver Exports

(Dominion Bureau of Statistics)

(In ores and concentrates)

(Fine Ounces)

	1957	1958	1959
Jan.	253,940	634,715	185,367
Feb.	380,463	208,149	329,742
Mar.	521,849	350,827	425,973
Apr.	431,646	284,971	989,593
May	523,228	376,082	564,017
June	468,559	438,253	871,570
July	844,545	529,770	728,598
Aug.	811,530	279,511	688,042
Sept.	861,857	583,570	.....
Oct.	432,000	323,475	.....
Nov.	263,273	217,892	.....
Dec.	186,569	871,573	.....
Year	5,979,459	5,098,788	.....

Canada's Silver Output

(Dominion Bureau of Statistics)

(In Ounces)

	1957	1958	1959
Jan.	2,158,631	2,529,583	3,094,440
Feb.	2,051,679	2,294,655	2,264,903
Mar.	2,346,316	2,448,698	2,782,307
Apr.	2,225,638	2,558,958	2,691,503
May	2,111,185	2,650,665	2,499,149
June	2,208,584	2,527,632	2,676,937
July	2,383,390	2,385,687	2,867,957
Aug.	2,592,468	2,884,154	2,518,288
Sept.	2,382,121	2,856,304	.....
Oct.	2,817,358	2,390,027	.....
Nov.	2,566,519	2,643,790	.....
Dec.	2,537,984	2,917,528	.....
Year	28,361,873	31,087,681	.....

Canada's Nickel Output

(Dominion Bureau of Statistics)

(In Tons)

	1956	1957	1958	1959
Jan.	14,985	16,609	16,710	8,047
Feb.	14,997	15,027	15,896	12,616
Mar.	15,504	16,733	15,853	14,922
Apr.	14,431	15,347	15,163	15,493
May	15,203	16,225	15,231	16,622
June	14,492	15,447	14,603	16,599
July	15,125	15,878	12,851	16,199
Aug.	14,852	16,756	12,597	16,784
Sept.	14,530	15,604	11,786	....
Oct.	15,762	15,628	3,682	....
Nov.	15,062	14,587	3,178	....
Dec.	14,824	15,096	3,298	....
Year	178,767	188,962	140,842	....

Canadian Copper Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1959		
	July	Aug.	Sept.
Ore, matte, regulus, etc. (content)	2,949	4,605	2,629
United States	1,697	304	453
Belgium	61	116	139
Germany (W.)	54	118	...
Norway	737	1,355	1,852
United Kingdom	106	75	185
Japan	294	2,637	...
Ingots, bars, billets, anodes	13,650	15,155	28,684
United States	3,928	7,224	15,661
Belgium	672	...	280
France	448	168	1,037
Germany (W.)	392	1,204	784
Greece	56	...	...
Italy	84	308	504
Netherlands	...	727	812
Portugal	...	112	...
United Kingdom	7,332	4,650	8,556
India	738	761	1,049
Other countries	...	1	1
Total Exports:			
Crude & refined	16,599	19,760	31,313
Old and scrap	414	469	852
Rods, strips, sheet & tubing	927	1,155	1,861

Canadian Zinc Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1959		
	July	Aug.	Sept.
Ore (zinc content)	23,121	18,464	14,367
United States	12,723	16,609	10,458
Belgium	...	1,318	3,571
Germany (W.)	...	...	338
Netherlands	1,233	537	...
Norway	6,792	...	...
United Kingdom	2,373	...	...
Slab zinc	16,237	11,546	12,519
United States	8,870	6,130	6,960
Chile	...	28	...
United Kingdom	6,620	5,002	5,497
Korea	714	386	62
Other countries	33	...	...
Total Exports:			
Ore and slabs	39,358	30,010	26,886
Zinc scrap, dross, ashes	475	379	777
United States	144	161	47
Belgium	174	...	730
Germany (W.)	...	111	...
Netherlands	157	107	...

French Copper Imports

(A.B.M.S.)

(In metric tons)

	1959		
	July	Aug.	Sept.
Crude copper for refining (blister, black and cement)	406	....	974
United Kingdom	....	....	161
Belgian Congo	406	....	813
Refined	14,613	13,376	6,166
United States	1,467	1,923	718
Canada	2,032	480	813
Chile	1,500	1,975	....
Belgium	4,733	3,634	2,488
Germany (W.)	213	....	86
Norway	178	127	127
Sweden	50	22	....
United Kingdom	....	89	....
Belgian Congo	2,767	3,505	832
Rhodesia-Nyasaland	1,673	1,621	1,102

Canadian Lead Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1959		
	July	Aug.	Sept.
Ore (lead content)	5,378	7,945	6,081
United States	2,523	2,373	2,925
Belgium	1,446	2,768	3,156
Germany (W.)	1,409	2,804	...
Refined lead	3,478	4,024	3,895
United States	2,281	3,847	3,524
Uruguay	65	...	...
United Kingdom	1,019	84	280
Korea	110	...	49
Other countries	3	93	42
Total Exports:			
Ore and refined	8,856	11,969	9,976
Lead scrap	276	195	367

Copper Imports and Exports By Principal Countries

(A.B.M.S.)

Reported in ingots, slabs, etc.; except where otherwise noted.

(In metric tons)

	1959		
	June	July	Aug.
IMPORTS			
U. S. (blist., s.t.)	27,727	27,860	18,837
(ore, etc., s.t.)	12,112	5,331	6,301
(ref., s.t.)	19,320	10,742	12,935
Belgium*	20,225	...	...
Denmark	291	469	401
France (crude)	406	406	...
(refined)	11,462	14,613	13,376
Italy	10,405	...	...
Germany, West	29,916	24,280	...
Netherlands	2,794	2,809	1,450
Norway	382	...	...
Sweden	5,020	6,118	...
Switzerland	2,711	2,382	3,286
U. K. (l.t.)	38,382	32,958	35,921
India blister/-ref., l.t.)†	1,968	3,572	3,146
Australia (blister & re'd l.t.)	1,427	...	...
EXPORTS			
U. S. (ore and unref., s.t.)	37	20	...
(refined, s.t.)	12,607	11,378	116,605
Canada (refined, s.t.)	21,310	13,650	15,155
Belgium*	12,833	...	...
Finland††	484	757	...
Germany, West	6,473	7,712	...
Norway	2,013	...	...
Sweden	1,703	2,159	...
U.K. (l.t.)	4,704	5,116	7,284
Turkey*	1,008	...	...
No. Rhodesia (blister & ref., l.t.)†	43,092	43,141	41,910

* Includes alloys.
†† Includes old.
† British Bureau of Non-Ferrous Metal Statistics.

Canada's Nickel Exports

(Dominion Bureau of Statistics)

(Refined, in oxides, matte, etc.)

(In Tons)

	1957	1958	1959
January	14,260	14,233	6,757
February	9,974	12,157	7,976
March	14,958	12,316	14,006
April	18,671	20,962	14,213
May	18,351	20,574	16,142
June	14,539	16,144	15,901
July	14,181	14,055	11,985
August	14,966	13,012	13,664
September	14,160	14,371	.....
October	13,370	8,335	.....
November	16,620	3,001	.....
December	14,606	5,060	.....
Year	178,656	154,220	.....

French Zinc Imports

(A.B.M.S.)

(In metric tons)

	1959		
	July	Aug.	Sept.
Ore (gross weight)	23,798	24,602	22,343
Belgium	....	256	13
Finland	1,130	2,000	2,000
Greece	2,934	4,217	....
Italy	150	1,576	5,934
Norway	1,378	....	....
Sweden	850	....	....
Yugoslavia	2,015	....	....
Algeria	5,105	6,185	9,980
Morocco	5,942	10,368	2,179
Tunisia	2,075	....	....
Belgian Congo	2,219	....	2,196
Burma	....	....	41
Slabs, bars, blocks, etc.	1,537	1,352	710
Belgium	1,155	900	330
Italy	142	127	157
Netherlands	240	....	....
Rhodesia & Nyasaland	....	325	223

French Metal Exports

(A.B.M.S.)

(In metric tons)

	1959		
	July	Aug.	Sept.
LEAD			
Ore (gr. wt.)	84	114	716
Pig lead	684	26	117
United States	195	....	....
Denmark	203	....	....
Sweden	....	....	12
Switzerland	260	....	50
Other countries	26	26	55
Antimonial lead	52	105	24
ZINC			
Slabs, bars, blocks, etc.	83	477	890
COPPER			
Crude copper for refining (blister, black and cement)	256	133	146

U. K. Copper Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1959		
	July	Aug.	Sept.
(Gross Weight)			
Copper and copper alloys	32,958	35,921	38,040
U. of S. Africa	...	101	200
Rhodesia-Nyasaland	15,442	22,628	19,566
Canada	7,212	6,078	7,636
Belgium	9	5	4
Germany (W.)	25	27	24
Norway	200	200	550
United States	772	2,022	1,521
Chile	9,000	4,850	8,000
Belgian Congo	250	...	...
Other countries	48	10	39
Of which:			
Electrolytic	18,916	24,267	28,061
Other refined	4,925	2,450	4,475
Blister or wrought	8,706	8,932	5,400
Wrought and alloys	411	272	104
Total	32,958	35,921	38,040

Nonferrous Castings

MONTHLY SHIPMENTS, BY TYPE OF METAL
(Bureau of Census — Thousands of Pounds)

	Aluminum	Copper	Magnesium	Zinc	Lead Die
1954 Total	607,764	834,557	25,572	474,741	18,396
1955 Total	833,058	1,011,748	27,892	781,254	21,045
1956 Total	801,136	966,473	36,168	88,069	20,734
1957 Total	751,856	875,389	30,322	663,330	23,791
1958					
March	50,547	60,157	1,975	39,719	1,630
April	44,948	59,311	2,215	35,796	1,467
May	44,093	57,506	2,422	36,447	1,655
June	40,701	57,124	2,205	38,132	1,971
July	38,818	51,124	2,200	32,765	1,394
August	45,034	57,790	1,869	35,860	1,804
September	52,796	64,447	2,804	47,127	1,725
October	55,699	74,012	2,627	45,045	1,708
November	55,793	62,476	2,615	48,431	1,409
December	59,487	67,905	2,612	55,600	1,497
Total	596,816	739,915	27,228	508,297	18,920
1959					
January	62,927	66,874	2,151	53,347	1,571
February	62,486	69,589	2,162	48,779	1,285
March	73,351	78,641	2,129	57,600	1,765
April	72,976	82,799	2,455	57,325	1,862
May	68,968	78,413	2,370	60,656	2,025
June	66,471	79,730	2,484	56,128	2,007
July	56,911	67,073	2,265	46,756	1,858
August	55,769	69,304	2,243	46,566	1,898

Copper Castings Shipments

BY TYPE OF CASTING
(Bureau of Census) (Thousands of Pounds)

	Total	Sand	Permanent Mold	Die	All Other
1952 Total	1,009,910	910,862	63,865	8,259	26,924
1953 Total	990,496	888,369	61,316	10,077	30,734
1954 Total	834,557	751,804	48,849	6,480	27,394
1955 Total	1,011,748	907,852	63,041	8,541	31,408
1956 Total	966,113	866,404	57,522	10,023	32,134
1957 Total	875,389	789,819	44,746	10,776	30,048
1958					
January	69,707	63,294	3,327	894	2,192
February	58,356	52,579	3,202	796	1,779
March	60,157	54,007	3,395	823	1,932
April	59,311	53,271	3,385	949	1,705
May	57,506	51,634	3,077	891	1,904
June	57,124	51,967	3,001	839	1,317
July	51,124	46,636	2,351	792	1,345
August	57,590	52,981	2,425	682	1,702
September	64,447	58,435	2,888	876	2,248
October	74,012	67,564	3,239	790	2,419
November	62,746	57,386	2,604	810	1,946
December	67,905	61,119	3,535	1,059	2,192
Total	739,985	667,255	36,529	10,201	22,681
1959					
January	66,874	59,856	3,572	1,216	2,230
February	66,589	62,593	3,557	1,176	2,263
March	78,641	69,472	4,333	1,361	3,475
April	82,799	73,567	4,640	1,328	3,264
May	78,413	69,351	4,363	1,291	3,408
June	79,730	70,836	4,421	1,175	3,298
July	69,073	61,650	3,869	946	2,608
August	69,304	60,671	4,410	993	3,230

Nickel Averages

Electro, cathode sheets, 99.00%, f.o.b. refinery, duty included
(Cents per pound)

	1956	1957	1958	1959
Jan.	64.50	74.00	74.00	74.00
Feb.	64.50	74.00	74.00	74.00
Mar.	64.50	74.00	74.00	74.00
Apr.	64.50	74.00	74.00	74.00
May	64.50	74.00	74.00	74.00
June	64.50	74.00	74.00	74.00
July	64.50	74.00	74.00	74.00
Aug.	64.50	74.00	74.00	74.00
Sept.	64.50	74.00	74.00	74.00
Oct.	64.50	74.00	74.00	74.00
Nov.	64.50	74.00	74.00	....
Dec.	72.48	74.00	74.00	....
Aver.	65.165	74.00	74.00	....

Platinum Averages

N. Y. MONTHLY QUOTATIONS
(Dollars per Troy Ounce)

	1956	1957	1958	1959
Jan.	106.30	101.92	77.85	52.57
Feb.	104.34	98.59	74.82	59.25
Mar.	104.23	93.50	72.096	77.10
Apr.	103.92	93.45	70.72	77.18
May	105.23	92.865	67.34	77.50
June	106.50	92.02	66.18	77.50
July	106.50	90.265	64.35	78.00
Aug.	105.76	84.426	60.94	78.00
Sept.	105.50	84.00	59.50	78.00
Oct.	104.85	84.00	57.327	78.00
Nov.	104.50	83.80	56.41	....
Dec.	104.50	78.70	53.154	....
Aver.	105.18	89.79	65.07	....

Spot Straits Tin

(Straits, Open Market, N. Y.)
Monthly Average Prices

	1956	1957	1958	1959
Jan.	105.036	101.511	92.94	99.411
Feb.	100.803	101.132	93.915	102.785
Mar.	100.786	99.643	94.452	103.042
Apr.	92.268	99.304	92.988	102.505
May	96.994	93.347	94.512	103.125
June	94.589	98.05	94.708	104.25
July	96.143	96.52	94.892	102.337
Aug.	99.049	94.261	94.988	102.333
Sept.	103.809	93.406	94.101	102.44
Oct.	106.023	91.838	96.523	102.238
Nov.	110.921	89.236	99.118	....
Dec.	104.268	92.35	98.989	....
Aver.	101.475	96.301	95.177	....

Prompt Tin Prices

(Straits, Open Market, N. Y.)
Monthly Average Prices
(Cents per Pound)

	1956	1957	1958	1959
Jan.	104.768	101.347	92.653	99.351
Feb.	100.586	100.257	93.763	102.708
Mar.	100.524	99.476	94.363	103.042
Apr.	99.145	99.286	92.988	102.505
May	96.853	98.335	94.512	103.107
June	94.488	98.025	94.619	104.142
July	96.131	96.44	94.892	102.337
Aug.	98.924	94.159	94.976	102.345
Sept.	103.559	93.313	94.054	102.435
Oct.	105.716	91.848	96.455	102.238
Nov.	110.329	89.236	98.985	....
Dec.	104.00	92.34	98.96	....
Aver.	101.252	93.672	95.069	....

Quicksilver Averages

N. Y. Monthly Averages
Virgin, Dollars per 76-lb Flask

	1956	1957	1958	1959
Jan.	277.80	256.00	224.35	219.50
Feb.	270.29	256.00	229.39	219.50
Mar.	261.40	256.00	232.096	223.57
Apr.	267.22	256.00	233.06	239.52
May	267.675	256.00	229.48	245.86
June	260.69	256.00	229.00	241.64
July	256.06	256.00	230.25	236.74
Aug.	256.00	252.20	240.27	232.524
Sept.	256.00	248.58	241.12	225.429
Oct.	255.92	234.48	235.94	224.548
Nov.	255.13	228.33	230.05	....
Dec.	256.00	226.50	223.54	....
Aver.	261.71	248.51	230.96	....

Primary Aluminum Output, Shipments and Stocks

(U. S. Department of Interior)

	Stocks beginning of month short tons	Production short tons	—Sold or Used— Short tons	Value f. o. b. plant	Stocks end of month short tons
1957 Total	....	1,647,714	1,579,035	.....	.....
1958					
July	168,096	118,541	134,083	64,726,335	152,554
August	152,554	125,416	132,765	64,611,494	145,205
September	145,205	124,714	146,870	71,641,275	125,049
October	124,274	139,836	139,908	68,881,146	124,202
November	124,202	140,962	126,619	62,133,129	138,545
December	138,545	152,201	145,125	70,946,494	145,721
Total	....	1,565,556	1,595,067	.....	.....
1959					
January	146,086	156,700	127,678	$62,375,824	175,108
February	175,108	142,116	133,397	65,668,578	183,827
March	183,827	157,189	181,839	82,304,609	159,177
April	159,177	155,213	182,930	90,070,280	131,460
May	131,460	163,857	182,607	89,672,327	112,710
June	112,710	167,323	191,421	93,955,552	88,612
July	88,612	179,194	187,387	91,635,864	80,419
August	80,419	172,816	159,206	77,711,678	94,029
September	74,029	168,206	153,170	74,809,052	109,095

Aluminum Wrought Products

PRODUCERS' MONTHLY NET SHIPMENTS
(Bureau of Census — Thousands of Pounds)

	Total	Sheet, Plate, Foil, Rod & Bar	Wire & Cable	Extruded Shapes & Tubing	Powder & Paste
1955 Total	2,805,500	1,542,368	365,391	812,311	35,854
1956 Total	2,870,101	1,577,601	398,602	782,398	28,017
1957 Total	2,677,423	1,396,502	399,040	789,430	28,187
1958					
April	210,477	118,793	22,178	62,737	1,954
May	217,299	115,660	27,361	67,376	2,389
June	228,587	118,767	28,674	74,580	2,248
July	229,654	126,160	24,678	72,194	2,642
August	213,548	115,376	23,581	67,953	3,154
September	231,168	125,937	23,287	75,269	2,665
October	254,023	128,967	24,442	85,038	2,163
November	216,249	121,190	17,771	71,666	1,723
December	235,377	130,474	26,253	72,979	1,806
Total	2,624,911	1,441,385	285,355	821,249	25,742
1959					
January	235,463	132,361	26,480	70,309	2,246
February	230,733	131,564	21,740	71,364	2,028
March	271,642	161,285	21,940	81,276	2,578
April	293,554	166,942	25,468	93,475	3,178
May	320,786	184,664	28,532	99,308	3,641
June	341,389	195,476	30,156	107,038	3,901
July	373,060	211,850	39,902	111,661	4,708
August	247,833	126,512	29,411	85,380	2,537
September	262,749	140,313	25,843	89,986	2,419

Aluminum Castings Shipments

(Bureau of Census)
BY TYPE OF CASTING
(Thousands of Pounds)

	Total	Sand	Permanent Mold	Die	All Other
1954 Total	609,066	155,738	213,968	232,726	6,800
1955 Total	833,058	171,757	298,115	354,804	8,282
1956 Total	801,036	171,763	245,421	376,108	7,736
1957 Total	751,656	144,121	232,326	369,086	...
1958					
May	44,093	9,312	13,648	21,091	...
June	40,701	8,644	13,679	18,292	...
July	38,818	8,658	12,342	17,714	...
August	45,034	9,034	14,426	21,505	...
September	52,796	10,261	16,241	26,254	...
October	55,699	10,932	17,189	27,511	...
November	55,793	10,539	16,942	28,264	...
December	59,487	10,874	18,970	29,579	...
Total	596,790	117,421	186,949	292,599	...
1959					
January	62,927	10,907	20,606	21,349	...
February	62,846	10,627	21,127	31,021	...
March	73,351	12,412	26,964	33,949	...
April	72,976	12,700	26,153	33,992	...
May	68,268	11,979	25,283	30,877	...
June	66,471	12,306	24,927	29,092	...
July	56,911	11,581	20,410	24,786	...
August	55,769	11,130	17,824	26,683	...

Virgin Aluminum

Ingot (30 lb.) 99½% Plus, Delivered
Monthly Average Prices
(Cents per pound)

	1956	1957	1958	1959
Jan.	24.40	27.10	28.10	26.80
Feb.	24.40	27.10	28.10	26.80
Mar.	24.60	27.10	28.10	26.80
Apr.	25.90	27.10	26.10	26.80
May	25.90	27.10	26.10	26.80
June	25.90	27.10	26.10	26.80
July	25.90	27.10	26.10	26.80
Aug.	26.70	28.10	26.77	26.80
Sept.	27.10	28.10	26.80	26.80
Oct.	27.10	28.10	26.80	26.80
Nov.	27.10	28.10	26.80	....
Dec.	27.10	28.10	26.80	....
Aver.	26.008	27.517	26.889	....

Magnesium Wrought Products Shipments

(Bureau of Census)

(Thousands of Pounds)

	1956	1957	1958	1959
Jan.	2,188	2,130	1,271	1,271
Feb.	1,901	2,522	1,280	1,691
Mar.	1,946	2,388	1,398	1,717
Apr.	2,279	2,511	1,479	2,089
May	2,462	2,230	1,443	1,644
June	2,302	1,881	1,709	1,946
July	2,002	1,428	1,227	1,681
Aug.	2,523	1,540	1,823	1,823
Sept.	2,031	1,501	1,807	1,807
Oct.	861	1,453	1,983	....
Nov.	2,141	1,230	1,662	....
Dec.	2,452	1,102	1,622	....
Total	24,975	21,915	18,702	....

Cadmium Averages

N. Y. Monthly Averages
Cents per lb. in ton lots

	1956	1957	1958	1959
Jan.	170.00	170.00	155.00	145.00
Feb.	170.00	170.00	155.00	145.00
Mar.	170.00	170.00	155.00	145.00
Apr.	170.00	170.00	155.00	120.00
May	170.00	170.00	155.00	120.00
June	170.00	170.00	155.00	120.00
July	170.00	170.00	155.00	120.00
Aug.	170.00	170.00	155.00	120.00
Sept.	170.00	170.00	152.60	120.00
Oct.	170.00	170.00	145.00	*140.00
Nov.	170.00	170.00	145.00	....
Dec.	170.00	166.40	145.00	....
Aver.	170.00	169.70	152.30	....

* As of Oct. 1, 1959, for lots of up to one ton.

Steel Ingot Production

(American Iron and Steel Institute)

Period	OPEN HEARTH Net tons	% of capacity	BESSEMER Net tons	% of capacity	ELECTRIC Net tons	% of capacity	TOTAL Net tons	% of capacity	Calculated weekly production, all companies (net tons)
1954 Total ..	80,327,494	73.6	2,548,104	53.2	5,436,054	52.0	88,311,652	71.0	1,693,741
1956 Total ..	102,840,585	91.6	3,227,997	67.4	9,147,567	81.2	115,216,149	89.8	2,203,828
1957 Total ..	101,657,776	87.0	2,475,138	54.9	8,582,082	71.3	112,714,996	84.5	2,161,776
1958									
March	5,598,944	53.9	122,317	35.7	533,361	43.6	6,254,622	52.3	1,412,000
April	4,875,619	48.5	109,433	33.1	547,939	46.3	5,532,991	47.8	1,289,741
May	5,602,123	53.7	110,366	32.3	588,670	48.2	6,301,159	52.7	1,422,384
June	6,378,942	63.4	88,125	26.6	660,413	55.8	7,127,480	61.6	1,661,417
July	5,712,587	55.0	114,218	33.4	593,600	48.6	6,420,405	53.7	1,452,580
August	6,481,815	62.4	134,135	39.3	670,383	54.8	7,286,003	61	1,644,696
September ..	6,769,660	67.3	103,194	31.2	737,518	62.3	7,610,372	65.8	1,778,124
October	7,795,541	75.0	148,458	43.4	873,779	71.5	8,817,278	73.8	1,990,469
November ..	7,572,555	75.3	145,867	44.1	850,896	71.9	8,569,318	74.1	1,997,510
December ...	7,764,000	74.7	117,000	34.2	832,000	68.1	8,793,000	72.9	1,971,000
Total	75,888,392	62.0	1,396,348	34.7	7,972,623	55.4	85,257,363	69.6	1,635,162
1959									
January	8,280,985	77.1	120,005	39.5	729,675	63.7	9,317,385	74.3	2,103,247
February	8,540,000	88.0	129,000	47.0	757,000	73.1	9,603,000	84.8	2,401,000
March	10,216,474	95.1	184,892	60.9	929,784	81.1	11,567,745	92.3	2,611,229
April	9,884,332	95.0	196,000	66.2	964,850	87.0	11,281,920	93.0	2,629,818
May	10,117,968	94.2	200,887	66.1	1,024,401	89.4	11,600,581	92.5	2,618,441
June	9,521,053	91.6	185,794	63.2	941,056	84.8	10,907,634	89.9	2,542,572
July	4,540,182	42.2	66,433	21.9	526,025	45.9	5,227,129	41.7	1,182,608
August	1,171,342	10.9	.....	...	267,935	23.4	1,439,277	11.5	324,893
September ...	1,249,398	12.0	.....	...	286,619	25.8	1,535,917	12.7	358,649
October	1,371,000	12.8	.....	...	308,000	26.9	1,685,000	13.4	380,000

Blast Furnace Output

(American Iron and Steel Institute)

	Pig Iron (net tons)	Ferro-manganese & Spiegel (net tons)	Total (net tons)	% Capacity
1950				
Tl. Yr.	64,810,272	673,896	65,484,168	91.5
1951				
Tl. Yr.	70,487,380	745,381	71,232,761	98.3
1952				
Tl. Yr.	61,828,665	629,926	62,158,591	84.2
1953				
Total	74,987,721	855,038	75,842,759	95.5
1954				
Total	58,119,382	568,735	58,688,117	71.6
1955				
Total	77,114,073	688,758	77,800,831	92.7
1956				
Dec. ..	7,268,743	65,841	7,334,584	101.0
Total ..	75,301,134	664,341	75,965,475	88.9
1957				
Jan.	7,209,547	72,826	7,282,373	98.8
Feb.	6,596,133	61,973	6,658,106	100.0
Mar. ..	7,179,100	67,779	7,246,879	98.3
Apr. ..	6,810,102	60,784	6,870,886	96.3
May ..	6,879,881	65,566	6,945,447	94.2
June	6,593,326	66,266	6,659,592	93.3
July	6,625,901	66,031	6,691,932	90.8
Aug. ..	6,719,763	61,988	6,781,751	92.0
Sept. ..	6,569,074	58,837	6,627,911	92.9
Oct. ..	6,454,450	65,028	6,519,478	88.4
Nov. ..	5,711,242	68,637	5,779,879	81.0
Dec.	5,212,624	69,175	4,854,444	62.8
Total ...	78,557,011	782,660	79,339,671	91.4
1958				
Jan.	4,785,269	69,175	4,854,444	62.8
Feb.	4,016,276	47,953	4,064,229	58.2
Mar.	4,418,778	45,175	4,463,953	57.8
April ..	3,787,907	39,302	3,827,209	51.2
May ...	4,048,328	25,468	4,073,796	52.7
June ...	4,396,285	26,463	4,422,748	59.1
July ...	4,277,515	26,668	4,304,183	55.7
Aug.	4,799,955	31,374	4,831,329	62.1
Sept.	5,041,042	31,348	5,072,390	67.8
Oct.	5,835,995	36,963	5,872,958	76.0
Nov.	5,907,888	39,275	5,946,163	79.5
Dec.	6,025,385	47,505	6,072,890	78.6
Total ..	57,298,644	465,456	57,298,644	63.5
1959				
Jan.	6,260,395	48,572	6,211,823	77.9
Feb.	6,047,398	45,274	6,192,672	85.3
March ..	7,461,760	48,291	7,510,051	93.4
April ..	7,338,372	54,234	7,392,606	95.0
May ...	7,683,759	64,237	7,747,996	96.4
June	7,231,631	58,315	7,289,946	93.7
July	3,550,159	23,391	3,573,550	44.5

Steel Castings Shipments

(Bureau of Census)

	Total (Short Tons)	For Sale (Short Tons)	For Own Use (Short Tons)
1951 ...	2,101,604	1,507,413	594,191
1952 ...	1,925,116	1,476,352	448,767
1953 ...	1,829,277	1,290,016	431,330
1954 ..	1,184,096	880,158	303,938
1955 ...	1,530,694	1,166,706	363,988
1956 ...	1,931,987	1,512,290	416,697
1957			
June ...	153,647	119,353	34,294
July ...	122,018	90,037	31,981
Aug. ...	145,926	111,080	34,846
Sept. ..	139,002	105,611	33,391
Oct. ...	146,397	113,216	33,181
Nov. ...	127,115	98,436	28,679
Dec. ...	120,787	92,125	28,662
Total ..	1,766,191	1,261,301	406,444
1958			
Jan. ...	120,722	94,717	26,005
Feb. ...	103,297	79,708	23,589
Mar. ...	106,233	82,195	24,038
Apr. ...	91,464	69,121	22,343
May	87,002	66,086	20,916
June ...	92,681	71,624	21,237
July ...	68,802	48,618	10,184
Aug. ...	80,886	59,816	21,070
Sept. ...	85,277	64,586	20,691
Oct. ...	95,389	73,367	22,022
Nov. ...	85,267	65,788	19,479
Dec. ...	103,800	81,360	22,440
Total ..	1,114,939	859,125	255,814
1959			
Jan. ...	105,392	82,693	22,709
Feb. ...	110,280	86,013	24,267
Mar. ..	131,317	103,848	27,469
Apr. ...	134,344	104,890	29,454
May ...	135,359	105,804	29,555
June ...	143,624	111,725	31,899
July ...	106,790	83,541	23,249
Aug. ...	98,014	79,188	18,826

Galvanized Sheet Shipments

(American Iron & Steel Institute)

(Net Tons)

	1956	1957	1958	1959
Jan.	269,464	235,902	186,649	279,244
Feb.	272,997	205,048	167,627	281,637
Mar.	291,193	206,836	195,885	311,961
Apr.	266,728	198,585	206,368	328,759
May	272,741	206,657	231,318	317,059
June	279,058	239,037	277,180	350,333
July	*	167,247	239,883	180,787
Aug.	276,048	186,790	253,263	.....
Sept.	256,803	183,952	258,723	.....
Oct.	278,637	212,886	290,157	.....
Nov.	255,135	190,380	253,909	.....
Dec.	239,173	159,363	266,472	.....
Total	2,957,991	2,392,637	2,828,843	.....

* Combined with August figures.

SHIPMENTS OF TIN-TERNEPLATE

(American Iron & Steel Institute)

(Net Tons)

	—Hot Dipped— 1958	1959	—Electrolytic— 1958	1959
Jan.	31,455	30,304	474,359	417,210
Feb.	29,451	24,602	397,861	442,625
Mar.	36,794	46,706	419,102	597,408
Apr.	43,670	54,906	468,568	689,998
May	37,628	64,110	402,521	689,064
June	42,850	62,965	429,761	673,819
July	45,481	36,381	422,776	244,719
Aug.	46,037	.....	464,439	.....
Sept.	43,217	.....	525,739	.....
Oct.	60,261	.....	763,361	.....
Nov.	14,596	.....	113,134	.....
Dec.	15,842	.....	150,942	.....
Total	447,396	.....	5,040,199	.....

Steel Ingot Operations

(Percentage of Capacity as Reported by American Iron & Steel Institute)

Week Beginning	1956	1957	1958	1959
Jan. 6...	97.6	98.4	56.1	76.2
Jan. 13...	98.6	96.4	57.0	73.6
Jan. 20...	99.0	96.6	55.5	74.6
Jan. 27...	100.4	97.6	54.0	72.6
Feb. 4...	99.3	97.1	54.0	76.9
Feb. 11...	99.1	97.7	53.5	83.8
Feb. 18...	98.8	97.8	50.9	83.7
Feb. 25...	98.8	96.0	54.6	88.5
Mar. 4...	99.3	97.1	53.1	90.3
Mar. 11...	100.0	93.8	52.4	92.0
Mar. 18...	100.6	93.5	52.5	92.9
Mar. 25...	99.5	92.4	50.6	92.9
Apr. 1...	96.6	90.6	48.6	93.2
Apr. 8...	97.7	90.3	48.5	93.3
Apr. 15...	100.9	90.4	46.8	93.8
Apr. 22...	100.2	88.7	47.9	93.5
Apr. 29...	100.5	87.0	47.8	94.2
May 6...	96.4	86.7	49.4	92.0
May 13...	95.2	84.2	52.3	92.9
May 20...	95.3	86.4	56.4	93.4
May 27...	97.3	88.0	58.1	93.6
June 3...	96.3	87.5	62.5	93.7
June 10...	96.7	86.5	84.0	92.0
June 17...	93.4	85.2	64.9	92.5
June 24...	93.0	84.0	61.7	87.8
July 1...	84.9	78.5	51.0	78.2
July 8...	12.3	78.7	53.4	79.5
July 15...	12.9	79.3	54.9	38.7
July 22...	14.6	79.4	57.3	12.9
July 29...	17.0	79.4	57.8	12.2
Aug. 5...	16.9	79.8	58.8	11.2
Aug. 12...	57.5	80.6	60.5	11.8
Aug. 19...	87.5	82.1	62.6	11.3
Aug. 25...	95.8	82.2	63.5	11.7
Sept. 2...	97.0	81.0	61.7	11.5
Sept. 9...	98.7	81.9	65.9	11.6
Sept. 16...	100.6	82.1	65.6	12.6
Sept. 23...	100.6	82.2	67.3	12.8
Sept. 30...	101.6	82.6	70.4	12.8
Oct. 7...	101.8	82.8	71.6	12.8
Oct. 14...	100.9	80.9	74.2	13.0
Oct. 21...	101.4	80.2	74.8	13.1
Oct. 28...	101.2	79.7	75.0	13.1
Nov. 4...	101.3	78.0	74.5	13
Nov. 11...	100.6	77.7	74.5	45.6
Nov. 18...	100.2	76.0	74.1	...
Nov. 25...	100.1	72.1	73.7	...
Dec. 2...	101.1	71.5	73.5	...
Dec. 9...	101.3	69.2	73.5	...
Dec. 16...	102.0	67.7	74.5	...
Dec. 23...	94.3	53.7	74.5	...
Dec. 30...	97.3	59.0	73.6	...

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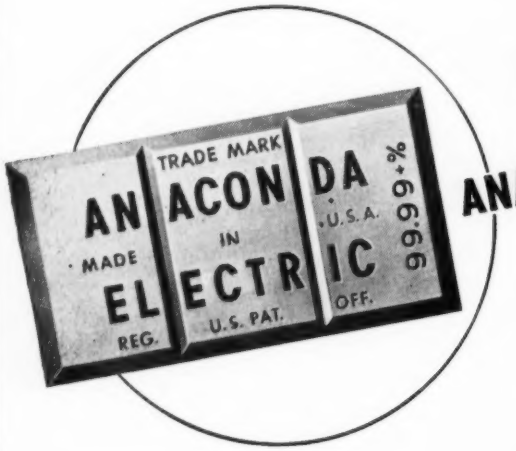

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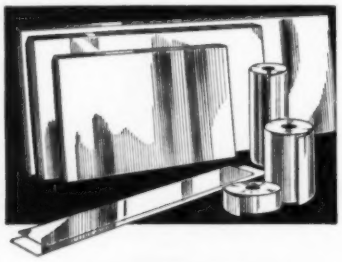

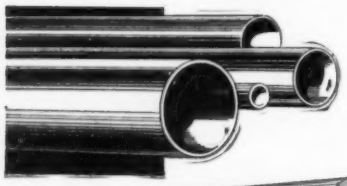

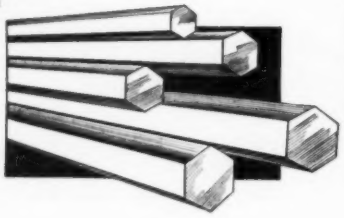

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